



PHD

“Please help me”: Excessive Reassurance Seeking as an Interpersonal Process in Obsessive Compulsive Disorder and Health Anxiety

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**“Please help me”: Excessive Reassurance
Seeking as an Interpersonal Process in
Obsessive Compulsive Disorder and Health
Anxiety**

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A thesis submitted for the degree of Doctor of Philosophy

University of Bath

Department of Psychology

January 2015

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This thesis is dedicated to the love of my life Bryndis and our two amazing boys

Ari Alvar and Styrmir Alvar

This would have been impossible without your endless support and love

“Ber er hver að baki, nema sér bróður eigi” (words of wisdom from the Icelandic Vikings)

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Abstract

Excessive Reassurance Seeking (ERS) is an under-researched and poorly understood behaviour that resembles the compulsive behaviours that are typically seen in obsessional problems. ERS can be complex, persistent, extensive, debilitating and may dominate the interactions of those involved. In addition to resembling compulsive checking in Obsessive-Compulsive Disorder (OCD) it may have the effect of transferring responsibility to another person. However, it could be seen as a type of support. Both ERS and support are defined and key questions about these concepts are considered in five studies which examine ERS from the perspectives of non-clinical samples, sufferers of anxiety problems, caregivers and therapists. Study 1 qualitatively examines interpersonal components of ERS in OCD and identified the experience of frustration in caregivers as being particularly pervasive. Study 2 examines the diagnosis specific/transdiagnostic elements of ERS in OCD and health anxiety contrasted with support using mixed methods. Results revealed some limited diagnosis specificity of ERS. Strikingly, people with health anxiety did not seek support; reassurance seeking may be their default response. Study 3 uses a larger sample to quantitatively evaluate therapists' perception of ERS and its treatment, with results suggesting that there is considerable room for improvement. Study 4 examined therapeutic intervention for ERS in treatment refractory OCD using a single case experimental design; Cognitive Behavioural Treatment (CBT) that focuses on treating ERS had beneficial effects. Study 5 tackled the diagnosis specific/transdiagnostic issues in a questionnaire by considering ERS across different anxiety problems. ERS may represent a final common pathway of multiple processes; some processes appear transdiagnostic; others may indicate disorder specificity. Overall, findings reveal the complexity of ERS and its likely nature as a safety-seeking behaviour which requires attention in treatment. Engendering support as an alternative to reassurance in CBT may be particularly promising.

Chapter 1:

Reassurance Seeking

Seeking reassurance from other people is probably the most common interpersonal reaction to ideas of threat and feelings of distress (Kobori & Salkovskis, 2013; Kobori, Sawamiya, Iyo, & Shimizu, 2014). This is not surprising given the fact that the effects of reassurance can be very positive as people often feel less anxious when someone provides them reassurance, by for example communicating that there is no need to worry. The reasons for the positive effects are currently not fully understood, but it has been suggested (e.g., Kobori & Salkovskis, 2013) that seeking reassurance works either because we are told by someone we trust in a convincing way that our worries are groundless (or less serious than we believe them to be) or because it helps us to identify a real threat which we can then deal with or somehow prepare for. It may be that the key to understanding these issues can be found in developmental aspects to reassurance seeking. In developmental terms reassurance seeking is a behaviour which is established at an early age and which evolves across the early stages of the lifespan. Offering reassurance where the child may be concerned about threat is both a common and a logical intervention for carers in a variety of situations that children encounter while growing up. It may even be an essential part of developing confidence in children to confront ambiguous, complicated and threatening situations. Generally children become less reliant on caregiver's reassurance as they gradually become more confident in their own abilities to deal with problematic situations or its consequences and, as their understanding of complex situations develops, can more readily disambiguate the potential for threat (Kobori & Salkovskis, 2013; Kobori, Salkovskis, Read, Lounes, & Wong, 2012).

As people progress through adult life, reassurance still serves as a helpful mechanism to control a sense of threat and to regulate feelings of anxiety particularly where the authority of others is clear (e.g. Medical doctors in the context of health matters, supervisors in job situations and so on). There are obvious differences between reassurance seeking in children and adults, particularly in relation to from whom the reassurance is sought and the kinds of reasons for doing so. For example, adults tend to have much more responsibilities than children, such as being the breadwinner, keeping their own family safe and so on. Consequently, adults seek reassurance from a much broader range of sources rather than just from the primary caregivers as in the case of children. Also, adults are more likely to have access to (and belief in) 'experts' with special knowledge about their fears (e.g. specialist doctors). In non-clinical populations, seeking reassurance from an expert is to be expected in circumstances where a person is confronted with high levels of uncertainty and considers threat to be particularly likely and simultaneously doubts his/hers own abilities to cope with the threat. Many people would probably agree that a doctor (the expert in this case) offers reassurance of better quality for health worries relative to a

partner with limited knowledge of physical health problems. Similarly, reassurance from a computer expert regarding Internet safety for children is less likely to be doubted compared to a non-expert. Again, when seeking expert reassurance this experience is used to build internal resources and understanding, having the effect that the individual is either less likely to seek reassurance when confronted with a similar threat, or decides to rely on the trusted person to deal with similar threats in the future (Kobori & Salkovskis, 2013). Confidence in building one's own expertise is probably key; failure to do so is likely to result in persistent seeking of reassurance. Understanding why this might not happen in those experiencing severe and persistent anxiety is likely to improve all aspects of assessment and treatment of this problem, as well as being helpful to those who end of providing reassurance to such patients. These issues form the focus of the work in this thesis.

Overview of Thesis

Investigation into Excessive Reassurance Seeking (ERS) has been hampered by a lack of adequate definitions of the key concepts including 'reassurance' and 'support' and by limited understanding of the difference between support, appropriate reassurance, and pathological reassurance seeking and giving of the type often clinically considered to be crucial to the maintenance of emotional disorders. This thesis represents an attempt to fill this gap by firstly offering definitions of key concepts and secondly through research where these definitions are deployed in empirical analyses of excessive reassurance seeking. The research section describes five different studies. The first study is a qualitative study using a semi-structured interview designed to explore caregivers' (here, those who provide reassurance to people with clinically diagnosed OCD) understanding and experiences of excessive reassurance seeking. The second study, which also employed a semi-structured interview, aimed at discovering the similarities and differences between ERS and support seeking in two samples of patients diagnosed with either OCD or health anxiety. In the third study, questionnaires were used to evaluate therapists' beliefs about ERS and the treatment interventions they consider essential when treating ERS. An additional expert reference group was included for benchmarking purposes. The fourth study is a single case experimental design where the treatment of ERS is described in a patient presenting with severe and treatment refractory OCD spanning seven decades of his life. In the fifth and final study, results from the previous four studies were pulled together to establish the differences and similarities in the function of ERS across different anxiety disorders. I will now consider the theoretical background which informed these studies.

Excessive Reassurance Seeking in Anxiety Disorders

Consideration of the theoretical context of anxiety disorders places excessive reassurance seeking in the broader context of the psychopathology of these problems. In its simplest form, Beck's cognitive theory of anxiety (Beck, Emery, & Greenberg, 1985) states that people suffer from anxiety related problems because they interpret situations, stimuli or events as more threatening than they really are. Thus, it is the interpretation (negative meaning) associated with the event that is crucial to the experience of anxiety. Having interpreted a situation as dangerous or threatening, this generates various reactions, including behavioural reactions; these are typically, safety-seeking behaviours (e.g. reassurance seeking) and may include focusing attention on potential sources of threat. There are also more automatic physical reactions (e.g. increase in heart rate) and increased levels of anxiety. In anxiety problems, these reactions have the unhelpful effect of increasing the negative meaning and the stimuli which were the original source of misinterpretation, which in turn, further increases the experienced anxiety and so on – leading to vicious cycles and a maintenance of the problem (Salkovskis, 1996b). A simplified version of this cognitive model of the persistence of anxiety is presented in Figure 1.

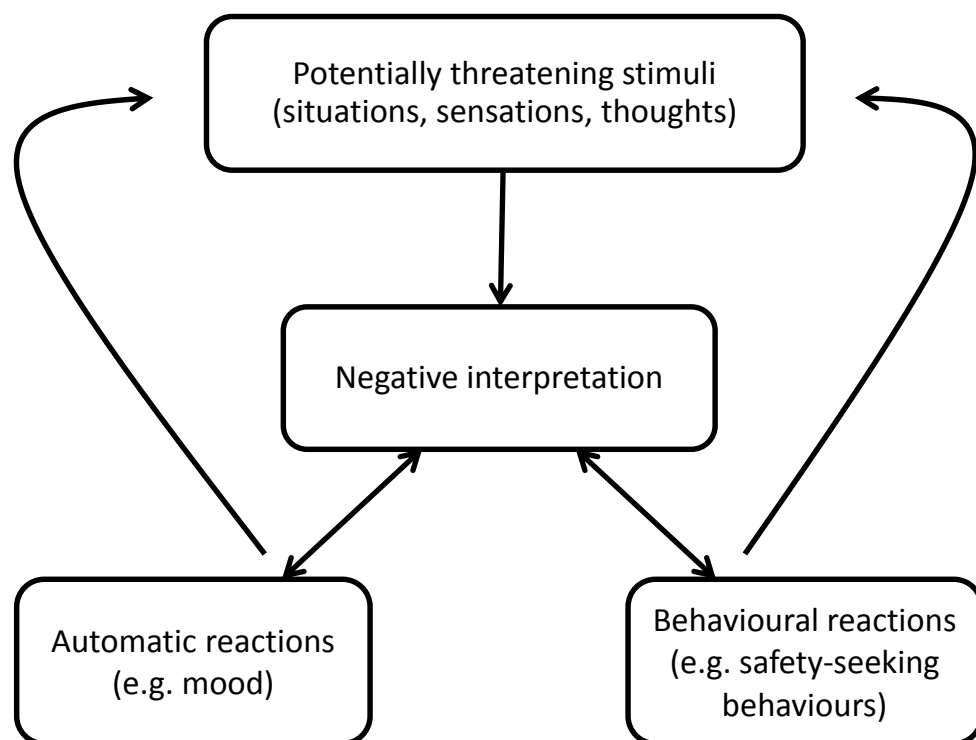


Figure 1. Simplified cognitive model of the persistence of anxiety related problems

In terms of safety-seeking behaviours, reassurance seeking from a trusted person is of course just one example of many such behavioural reactions that people might engage in when they feel under threat. Other examples include: compulsions, rumination, neutralization, avoidance and so

on. However, what makes reassurance seeking particularly interesting and clinically relevant is how complex and potent this interpersonal behaviour seems to be; it involves different components, i.e. a person must seek reassurance, then get the reassurance and finally do something with it such as accept it or decide that further reassurance is needed. Little is known about these different components (seeking vs. getting vs. processing it), for example whether they are equally important across different disorders.

The framework adopted here is to hypothesise that reassurance seeking functions as a high-potency safety-seeking behaviour (Salkovskis, 1996a) complicated by its intrinsically interpersonal nature. This view is supported with both research and clinical experience (e.g., Abramowitz & Moore, 2007; Salkovskis, 1999; Salkovskis & Warwick, 1986) and raises intriguing questions about the continuum of reassurance seeking which are best resolved by empirical work. Thus, reassurance seeking is not *necessarily* a problematic behaviour; it seems to occur along a continuum from an adaptive coping strategy to a more pathological version of the behaviour which has the effect of maintaining preoccupation with threat and prevents people from learning that their fears are groundless. This is why it is suggested that it operates as a safety-seeking behaviour (Salkovskis, 1991) as described in greater detail in the next chapter. The most obvious clinical example of the negative effects of ERS is of course health anxiety where this behaviour, has previously formed part of the DSM diagnostic criteria: *“the preoccupation persists despite appropriate medical evaluation and reassurance of good health”* (American Psychiatric Association, 2000, p. 507).

In recent years, several explanations have been put forward (which are discussed in more detail in subsequent chapters) to explain the relationship between reassurance seeking and emotional problems. They range from arguments that ERS is best conceptualised as a maintenance factor in anxiety pathology (Rachman, 2002; Salkovskis & Warwick, 1986) to considerations that ERS is specific to depression (Joiner, Metalsky, Gencoz, & Gencoz, 2001). As already identified, the untested idea that reassurance seeking functions as a safety-seeking behaviour underpins the work described here. More specifically, it is argued that ERS represents a special type of checking behaviour akin to compulsive checking in OCD with the added potential of transferring responsibility to other people (Rachman, 2002; Salkovskis, 1985, 1999). Many questions regarding reassurance seeking remain unanswered. For example, does it serve the same function and are there shared phenomenological properties that characterize safety-seeking behaviours, in particular checking compulsions? A logical first step when exploring this concept is to review how researchers and others understand and define the concept. Before we do that, let us explore why defining psychological concepts is of importance.

Why is it Important to Define Psychological Concepts?

A necessary criterion of an empirical hypothesis is that its principal terms are logically independent. Smedslund (1997, 2002, 2011) has convincingly argued that many psychological theories and hypotheses are in fact investigations that only appear to contribute to psychological knowledge but in reality are of tautological nature. Researchers in psychology all too often fail to offer sufficient definitions of key concepts or conceptual analysis of their main hypothesis. This may risk all kinds of problems including criterion contamination. As an example, depression and anxiety measurements often include somatic items such as fatigue, weight and sleep problems. Although these items are of course relevant in both disorders they are sometimes also heavily endorsed by other clinical groups, for example, people who suffer from pain who might respond to those items on a questionnaire in relation to the effect of pain itself and its effect on illness behaviour over time but not in relation to anxiety or depression (Pincus & Williams, 1999; Pincus, Williams, Vogel, & Field, 2004). Illustrations of problems related to lack of clear definitions have elegantly been reviewed elsewhere (e.g., Smedslund, 2008). With this criticism in mind, an obvious requirement for any research is access to adequate and clear definitions of the key concepts being investigated. Otherwise, the researcher runs the risk of being imprecise and unclear in what he is assessing and consequently makes it impossible to draw any firm conclusions from the results.

Defining Reassurance Seeking

An important requirement for the future development of understanding the relationship between reassurance seeking and emotional disorders are adequate definitions of key concepts. “Reassurance” is made up of the word “assurance” modified by the prefix, “re” meaning ‘again’. Amongst the definitions in the online version of the Oxford English Dictionary (2010), *assurance* is “to make certain”, whilst when put together, i.e. ‘re’ + ‘assurance’ means “to make certain *again*”. Thus the combination suggests the potential for pathological effects, i.e. requirement for certainty and persistence - if certainty has been achieved, doing so again is at best pointless. Interestingly, the dictionary also offers a more non-pathological definition of assurance that appears to be unrelated to perception of threat: “positive declaration intended to give confidence”, suggesting that within this context, reassurance is not in itself necessarily undesirable as the assurance can include or agree with a non-threatening alternative explanation. Although the latter definition of assurance is not identical to that in more clinical terms it can be considered as a potential guide to the distinction between helpful and unhelpful reassurance, i.e. to make certain versus to give confidence is some more general way.

Reassurance

In common with the anxiety literature, particularly Cognitive Behavioural Theory, the Oxford English Dictionary (2010) definition of “*reassurance*” is more explicit in highlighting the link with perception of threat: “A statement, comment, or other verbal communication that removes or allays a person’s doubts or fears, originally such a statement, etc., that is being renewed or repeated”. This definition highlights the repetitive form of reassurance seeking. Elsewhere, the provision of reassurance is further extended to non-verbal behaviours as the definition correctly identifies that reassurance can also be non-verbal: “renewed confidence provided by something other than words, such as an action, attitude, or belief”.

Current Definitions of Excessive Reassurance Seeking in the Psychotherapy

Literature

When the psychotherapy literature refers to reassurance, it usually refers to *excessive* reassurance seeking, intended to distinguish it from ‘normal reassurance’ or less pathological versions of the behaviour. There is no consensus as to what precisely constitutes excessive reassurance seeking. The meaning attached vary according to whether the concept is defined within the context of a single psychological disorder, such as health anxiety, or transdiagnostically (see below). Furthermore, there are differences in clinician’s and researcher’s emphasis and understanding of threat related motivational factors typically thought to underlie reassurance seeking. For example, within the sections of the depression literature (Coyne, 1976b) ERS is commonly associated with social threats (e.g. fears of abandonment/rejection) whereas some of the anxiety literature refers to factors such as, harm prevention, intolerance of uncertainty and dispersion of responsibility (see further Coughle et al., 2012). Given that there appears to be no widespread agreement on what constitutes ERS at a theoretical level, it is particularly relevant for current purposes to consider definitions that have historically received most research and clinical attention and also more recent attempts to define the concept.

The most cited definition comes from the depression literature where Joiner, Metalsky, Katz, and Beach (1999) defined ERS as “...the relatively stable tendency to excessively and persistently seek assurance from others that one is lovable and worthy, regardless of whether such assurance has already been given” (p. 270). This definition was extended from Joiner (1994) original definition of the concept: “...the tendency to excessively seek reassurance from others as to whether they truly care” (p. 289). Interestingly, both definitions give no consideration to the threat related nature of excessive reassurance seeking commonly seen in anxiety disorders (Coughle et al., 2012) and its entire focus on rejection and social loss interestingly bears strong resemblance to parts of the DSM diagnostic criterion of Borderline Personality Disorder: “Frantic efforts to avoid real or imagined abandonment” (American Psychiatric Association, 2013, p. 663).

Parrish and Radomsky (2010) offer a different approach to defining ERS. In their paper the authors refer to studies suggesting that ERS is a common problem amongst patients with a diagnosis of generalized anxiety disorder (GAD), health anxiety and OCD. Within the context of these disorders they define ERS as: "...the repeated solicitations of safety-related information from others about a threatening object, situation or interpersonal characteristic despite having already received this information" (Parrish & Radomsky, 2010, p. 211). Their inclusion of the threat related nature in the definition of reassurance seeking and the transdiagnostic approach to defining the concept is to be applauded, but it is argued here that Parrish and Radomsky's definition has limitations. Firstly, by focusing their definition on repetitiveness, they appear to exclude the possibility that reassurance seeking can be sporadic. This goes against clinical experience, particularly in cases of OCD where reassurance seeking can be of low frequency but still serve to maintain the anxiety problem (Kobori & Salkovskis, 2013). Finally, it is not clear why they chose to define reassurance only within three anxiety problems as opposed to more broadly/transdiagnostically.

The suggestion made by Parrish and Radomsky that reassurance seeking involves asking for information that has *already* been received, has emerged before in the literature. For example, in the 1980s, Salkovskis (1985) and Warwick and Salkovskis (1985), defined reassurance within the context of health anxiety and drew the parallel with OCD as repetitive provision of *old information*. Similarly, Rachman (2002) said that reassurance often appeared as a request for information, when in fact it is as an attempt to find safety from harm. Rachman also stated that the information requested rarely contained any new information and the patient almost always knew in advance what the answer would be, but the requests are still made in an attempt to decrease the experienced health anxiety. Rachman (2012) later revisited the concept and published what he called a 're-construal' of the nature and purpose of compulsive requests for reassurance within the context of health anxiety, where he said: "The person is seeking some relief from distress and anxiety, not information as such. Without necessarily recognising it themselves, sufferers are seeking *a response* not information as such." (p. 507 [original emphasis]). In his analysis, Rachman also highlights that although the persistent requests for reassurance in health anxious patients resemble compulsive OCD behaviours, he suggests an important difference between the two. While OCD sufferers typically try to resist their obsessions and compulsions and recognize them as unwanted or irrational, health anxious patients are more likely to feel the opposite; they seek reassurance openly, and from their point of view their fears are rational. Although Rachman's approach may be helpful, the author of this thesis would use a different approach and argue that the definition lacks in some respect specificity in terms of how reassurance works. Firstly, from a cognitive perspective, when a person seeks reassurance he or she is not seeking relief from distress and/or anxiety – it is not anxiety or distress that is being avoided; the person is seeking safety, motivated and driven by the perception of threat (and in

some cases also the perception of responsibility) from which feelings of anxiety and/or distress arise. Clinically we might witness this in an OCD patient who seeks reassurance from his partner by asking if he is clean enough, knowing very well that by asking for reassurance his anxiety will consequently *increase*, but the rise in anxiety is much more tolerable compared to being responsible for poisoning their children (perceived threat) and thus he asks for reassurance to decrease the perception of threat and share the responsibility. Secondly, the author disagrees with Rachman when he says that when people seek reassurance they are seeking “a *response* but not information as such” (Rachman, 2012. p. 507 [original emphasis]). It should be noted that the author assumes that Rachman is referring to *new* information, i.e. when reassurance is sought it is usually the same (or slightly re-phrased) question asked again and again, thus new information in the strictest sense is not necessarily being sought. However, it is argued here that in a more technical sense reassurance seeking does in fact involve seeking new information. That is not to say that the person providing the reassurance is necessarily requested to say (or is saying) something new or different compared to their previous responses/answers; the person asking for reassurance may simply want confirmation that nothing has changed, i.e. that the level of threat has remained the same – *status quo*. For example, when a caregiver is asked for the 100th time “are you sure I locked the door?” and patiently gives the same answer over and over again “yes”, the carer is not providing *new* information, but that does not mean that there is no information being provided – the absence of a change in a response carries information. Finally, with regards to Rachman’s argument that reassurance seeking involves seeking a ‘response’, the current author believes that people could equally be seeking a non-response when they seek reassurance. For example, a therapist’s failure to show any concern (non-response) when an OCD patient describes his intrusive thoughts can be reassuring for the OCD sufferer. Equally a health anxious patient, fearful of skin cancer, might intentionally wear German lederhosen and short socks to his General Practitioner (GP) appointment to make the potentially cancerous moles on his legs clearly visible. Although the patient never openly mentions his fears to his GP, he leaves the session feeling reassured because the doctor did not seem concerned or pay any attention to (non-response) the moles.

Finally, Starcevic et al. (2012) sought to define reassurance seeking specifically within the context of OCD as “the solicitation of information from others that would provide a sense of security, provide relief and diminish threat” (p. 560). The definition correctly identifies the perception of threat as a motivating factor in reassurance seeking. However, this same paper has some severe drawbacks that are hard to ignore because the authors quite confusingly argue that reassurance seeking “is not a type of compulsion, but rather, one of many strategies of coping with obsessions, which also include compulsions and avoidance” (p. 560). Note that the authors define reassurance specifically within the context of OCD; compulsions are typically defined as repetitive

intentional behaviours or mental acts which are intended to neutralize anxiety provoked by obsessions (American Psychiatric Association, 2013). The authors failure to consider the fact that reassurance seeking and compulsions share common features and both can be conceptualised as attempts to deal with the perception of threat leads to a very misleading (and simply wrong) definition. Their argument appears to be based on the idea that compulsions reduce anxiety triggered by obsessions by *directly* addressing the threat, for example washing one's hands in response to contamination fears. In contrast, they argue that reassurance seeking reduces the perception of threat *indirectly* because the individual is seeking information about the threat via other people and that information is then used to adjust the threat perception. Achieving clarity in terms of what the authors are referring to is difficult (if not impossible) given that it is well established that many OCD patients seek reassurance to deal *directly* with their threat beliefs. For example, when an OCD patient asks his partner "are you sure my hands are clean?" and feels reassured and consequently less distressed when the partner replies "yes"; how is the obsession-related distress not *directly* reduced? Just because there is another person involved in the compulsive behaviour (in this case the seeking of reassurance) does not make it indirect. Finally, the authors fail to explicitly state what they mean when they talk about 'coping strategies'. At best this is a misleading term. Within the literature (e.g., Salkovskis, 1996a; Thwaites & Freeston, 2005) there is a notion that coping strategies are helpful and do not maintain or make emotional problems worse as opposed to safety-seeking behaviours. Thus, defining and differentiating adaptive coping strategies from behaviours that are problematic is of critical clinical significance. Given the proposed role of reassurance seeking in maintaining or worsening various emotional problems, it becomes essential to clearly distinguish between reassurance seeking and other *interpersonal* anxiety related behaviours that could potentially help the person to cope with distress. It is argued here that the concept of *support seeking* plays a significantly important role within this context and this concept receives considerable attention in this thesis.

To summarize, the current definitions specify several critical dimensions for excessive reassurance seeking. These include components like: motivational factors, such as distress reduction or anxiety relief; safety-seeking; repetitiveness; persistence; perception of threat; and solicitation of old information. Some existing definitions are specific to individual problems while others are more transdiagnostic. The identification of these key components is extremely helpful and the author will draw upon these later in the chapter when a new approach to defining the concept is offered.

Differentiating Reassurance as an Unhelpful Threat Related Interaction from other Anxiety Related Interactions; the Special Case of Support

Requests for reassurance, in whatever form they are, can provide some brief reduction in the sense of threat and therefore anxiety relief, but the effects tend to be short lived and reassurance then tends to be sought over and over again, most likely as a result of the return or even increase in perceived threat (Salkovskis & Warwick, 1986). Typically the resurgence of threat ideas will be associated with a further return of distress and the urge to seek further reassurance. It is unclear as to why this happens, and there may be a range of explanations; for example, habitual doubting focussed on the reassuring information, increased accessibility and/or elaboration of threat ideas and so on.

With some notable exceptions particularly, Rachman (2002, 2012) and Salkovskis (1985) and Salkovskis, Warwick, and Deale (2003) the clinical wisdom is that therapists should simply refuse to give patients reassurance and caregivers should be encouraged to do the same. However, there are reasons to believe that this prescriptive approach is not necessarily helpful and practical although it makes sense in the context of behaviour theory as argued by Rachman (2002). Indeed, as a response to distress in others such a reaction (withholding reassurance) would be at best inappropriate, and at worst rejecting and interpersonally destructive.

In non-clinical situations, a caring person typically responds to someone's distress either by telling the person that their fears are unjustified and they do not need to worry (provision of reassurance); or whilst at the same time empathically identifying the distress itself as being the issue and helping the person recognise this and to deal with the distress rather than the perception of threat itself. It is argued here that this latter approach is best characterised as the provision of *support*, and is the hallmark of mature emotionally sustaining relationships as opposed to the more skewed approach to offering reassurance. The question we are then left with is: how best to define support? It is argued here that support seeking (and equally the provision of support) can be thought of as an:

Interpersonal behaviour, verbal or non-verbal, that is intended to get (or give someone) encouragement, confidence or assistance to cope with feelings of distress

Note, that support seeking is here defined with reference to *coping with distress* but not 'saving' the person from threat as we would expect for safety-seeking behaviours (Salkovskis, 1991). From a theoretical perspective, support seeking is here understood to represent the opposite to safety-seeking behaviour. When a person seeks support the intention is to seek help to cope with the distress and this interaction influences the sufferer's anxiety problem by providing him/her a

sense of control, encouragement and/or a belief that he/she can overcome the distress (or accept the anxiety for what it is). This is entirely different from safety-seeking behaviours that are focused on 'saving' the person (or others he/she feels responsible for) from threat or its consequences (and in some cases transferring responsibility onto another).

The above definition of support is central to the way we currently conceptualise cognitive behavioural treatment for problems such as OCD. According to this view, the person experiencing severe and persistent anxiety does so because they believe that what is happening to them is more dangerous than it really is, and they have become 'stuck' in this belief. Treatment involves identifying the threat beliefs and associated reactions (understanding this as 'theory A') and contrasting this to an alternative, less threatening explanation ('theory B'). The patient is helped to consider the merits of the competing perspectives, and on that basis to make changes which will help them differentiate them in terms of which is most useful and therefore more accurate. For an OCD patient with violent intrusions about harming his/her children, theory A might be: 'my problem is that I am a violent and dangerous person'. If you are someone who believes that you are at risk of harming your children and that concerns you, seeking safety, in this case reassurance from your partner is very logical. If on the other hand you are helped to shift your view of the problem away from this idea onto the idea that 'your problem is that you are anxious and you need to overcome your anxiety' (theory B), then seeking support, for what you believe may be anxiety arising from an exaggerated sense of threat, is the appropriate thing to do (Salkovskis, 1999; Salkovskis & Wahl, 2003).

With this in mind a new approach to defining reassurance is offered here and this definition will be used in the rest of this thesis to provide a conceptual framework for studying the phenomenon of reassurance seeking across disorders and assessing its psychological significance. It should be noted that 'excessive' is defined separately (see page 24).

Verbal and/or non-verbal interaction with someone, who you perceive has access to potentially threat relieving information, with the intention of increasing your perceived sense of certainty of safety from harm

This definition could usefully be modified to facilitate its application in more specific disorders. The specific identification of 'appraisals of responsibility' as an additional motivational factor in OCD and health anxiety is an example of this. The responsibility factors are believed to overlap between these two disorders, but are not necessarily the same, i.e. there is some difference in specificity. In addition to dealing with the perception of threat, obsessional patients seek reassurance to disperse (or transfer) any/some responsibility of harm to others, whereas in health anxiety the responsibility factors are less broad and are specifically focused on the person's health

and medical consultations where the individual intends to draw the attention of others to his or her physical state to allow for the detection of any abnormality (Salkovskis, 1996b).

It should be noted that the definitions of support seeking and excessive reassurance seeking were developed in consultation with two experienced clinicians and researchers who have published extensively within the field of cognitive and behavioural theory.

Types of Reassurance Seeking

Direct verbal questions about perceived threat or its consequences (e.g. “are you sure my hands are not contaminated?”; “do you think there is something wrong with my heart?”; “is this safe?”) are probably the most common form of reassurance seeking in both clinical and non-clinical context. However, as mentioned earlier the Oxford English Dictionary (2010) correctly identifies the possibility of seeking reassurance non-verbally (the above mentioned definition takes that into account). Examples include the person with OCD who requests his partner to perform rituals (e.g. checking locks) on his behalf or watch him while he washes his hands to make sure it is done correctly. Furthermore, as pointed out elsewhere (e.g., Kobori & Salkovskis, 2013; Salkovskis and Warwick, 2001) and earlier in the thesis, the seeking (and provision) of reassurance is not always ‘direct’ and ‘obvious’ as in many cases there are elements of subtle, disguised or hidden reassurance seeking where even the person providing the reassurance may be completely unaware of the fact the he or she is doing so. Furthermore, non-verbal aspects of a response (e.g. facial expressions, tone of a person’s voice etc.) can serve as important features of reassurance (Kobori et al., 2012). Examples here include the OCD patient who ‘just mentions’ to his therapist that he ‘only washed his hands once’ and then waits to see if the therapist reacts negatively; or the doctor’s failure to show concern, when the patient describes a particular symptom, can be reassuring.

These examples clearly suggest that reassurance seeking has a strong interpersonal component, i.e. it is between people. In fact, the interpersonal elements distinguish reassurance from other behavioural reactions hypothesised to maintain emotional problems and it is argued here that due to the interpersonal components, reassurance is particularly complex and potent. This will be discussed in more detail in chapter 2.

From Who or What is Reassurance Sought?

A key question relates to who or what the person regards as sufficiently competent to seek reassurance from. Fundamentally, this is rather like asking what a person with contamination fears regards as ‘cleansing’. It is argued here that the answer will vary from person to person, but is best considered in terms of what the person believes will have the longer term effect of reducing their level of threat or danger or responsibility for these. Note that this is not necessarily

what would reduce their anxiety and in some cases we know that safety-seeking behaviours can increase anxiety whilst counteracting the sense of threat (Clark, 1999). The key issue would be the extent to which the source of information is regarded by the person as authoritative in terms of speaking to the perceived threat (Salkovskis, Shafran, Rachman, & Freeston, 1999). This means that simply getting the same information again in the face of growing doubts may be sufficient because it removes the doubt that anything has changed. Carers (family members, friends, partners and so on) are often heavily involved in providing reassurance, particularly in emotional problems such as OCD, on the basis that they are an authoritative person who is familiar with the sufferer and their problems and may be able to provide an 'external' perspective. However, there is also another focus of reassurance seeking which involves experts such as medical professionals and doctors and this is particularly the case in health anxiety. Reassurance can also be sought from others regarded as experts in particular specialist areas, for example electricians, for instance if someone worries that certain electrical wires are unsafe he or she might ask for a 'specialist' opinion and someone with OCD might seek reassurance from a religious figure about blasphemous thoughts. People also seek reassurance from authorities, such as the police, who either have expertise or who are regarded as able to provide information on issues such as responsibility and blame. For example, a person might call the police to check for road safety before travelling, or a more pathological example where an OCD patient repeatedly calls the police to check if any 'hit and run accidents' had been reported on that day because he or she fears having killed or hurt someone without remembering it. In addition, there is also reassurance seeking that takes place in psychiatric treatment settings but this will be discussed specifically in chapter 5.

Some people report seeking reassurance (and feeling successfully reassured) from inanimate objects, such as computers, medical journals or books. It is argued here that the literature (e.g., Thibodeau, Asmundson, & Taylor, 2013) incorrectly refers to this as a form of *self-reassurance*¹. Leaving that aside for a brief moment; it is true that health anxiety is commonly associated with searching for health related information on the Internet (Muse et al., 2012); whereas sufferers of OCD might read online OCD support discussion forums to check if other people are having similar intrusive thoughts. The proposed new definition of reassurance seeking does specify that reassurance seeking involves an "interaction with *someone*" and as such might be understood to exclude inanimate objects such as books, computers etc. However, this is not the case. In fact it is argued here that inanimate objects (including sources such as computers and books) can provide reassurance – because such media can be interpreted as authoritative sources and interpersonal.

¹ More recently the excessive search for health related information on the Internet has been referred to as *Cyberchondriasis* (Muse, McManus, Leung, Meghreblian, & Williams, 2012)

For example, reading an article on a NHS website describing that skin moles are normal, may offer reassurance – a health anxious patient troubled by thoughts of having undiagnosed skin cancer might think: “an experienced dermatologist must have written this article...so it must be true”. Nevertheless, this type of reassurance seeking is more indirect, non-interactive and lacks various non-verbal features that come with face-to-face reassurance, such as person’s tone of voice, which for some people may be necessary for reassurance to have its desired (full) effect. Consequently, this type of reassurance is thought to have lesser impact on the perception of threat and responsibility and the associated feelings of distress although this remains to be tested empirically.

What about *self*-reassurance? Can people reassure themselves? When a health anxious patient spends hours every day checking his body, or when an OCD patient repeats in his/her own mind “It’s off, it’s off...the cooker is off!” and equally “it’s ok, it’s ok, everything is ok”, is that person seeking reassurance? Based on the current literature and how this is dealt with clinically, the answer would probably be yes. For example, Thibodeau et al. (2013) refer to repetitive bodily checking as a form of self-reassurance and when Clark and Beck (2011) talk about reassurance they give an example of a female patient that repeated certain statements in her mind to calm herself down. However, this is in contrast to how reassurance seeking is understood here, mainly for one reason: it excludes any elements of authoritative sources. It is argued here that reassurance must involve someone (or something) else who is considered authoritative if it is to be reassuring. Nonetheless, simply involving an authoritative figure does not guarantee reassurance; some kind of a response is required. Thus people’s attempts to reassure themselves can only be partially satisfied and is subject to more anxiety and feelings of doubt. Thus, involving others is a necessary requirement, but not a sufficient condition of reassurance – some active involvement on behalf of the other person/agent, someone/something who is trusted, is always needed (although this active involvement can be unintentional as in cases of hidden reassurance).

But what about the examples mentioned above, i.e. bodily checking and repetitive self-statements? It is argued here that when clinicians and theoreticians refer to self-reassurance they are most of time referring to: (i) physical checking (as in the case of body checking); (ii) another strand of compulsive checking behaviour (as in the case of self-statements), i.e. mental checking (Radomsky & Alcolado, 2010); or (iii) neutralization which is better understood as a form of restorative behaviour (like washing compulsions) aimed at putting things right that have perhaps already gone wrong, whereas checking compulsions (like ERS) are a form of verification in which the person fears that they may be in danger of causing harm (Cougle, Lee, & Salkovskis, 2007). This precision in differentiating self-reassurance from other forms of reassurance might seem subtle. However, if we assume that ‘dispersion of responsibility’ is a motivational factor in

reassurance seeking (Rachman, 2002; Salkovskis, 1985, 1999) this analysis becomes very important and mainly for one reason: it offers conceptual clarity. Achieving the transfer of responsibility in self-reassurance is simply impossible because no other person is involved in the process.

What is *Excessive Reassurance Seeking*?

Reassurance seeking as defined by this: “Verbal and/or non-verbal interaction with someone, who you perceive has access to potentially threat relieving information, with the intention of increasing your perceived sense of certainty of safety from harm” can be *excessive* in at least three ways. Firstly, there is the idea that reassurance seeking is a form of special (compulsive) checking behaviour, and as a safety-seeking behaviour maintains the perception of threat as part of a vicious circle where the perception of threat motivates the reassurance seeking which then maintains it (Salkovskis, 1985, 1991, 1999). In other words it is excessive because it moves from being helpful to becoming counterproductive.

Secondly, given that reassurance seeking is a purposeful and motivated behaviour, there is another layer of excessiveness which relates to how compulsions within the context of OCD can become excessive (Stott, Mansell, Salkovskis, Lavender, & Cartwright-Hatton, 2010). In the early stages, sufferers of anxiety problems typically manage to resist urges to seek reassurance, but gradually the behaviour becomes ‘overpracticed or proceduralized’ where the meaning attached to the behaviour and the reason they started doing it has become obscured, forgotten, or dropped from awareness. Under such circumstances the behaviour is considered excessive, because although the meaning may be ‘hidden’ the behaviour still functions as a safety-seeking behaviour, that is, a response intended to deal with the perception of threat and the associated anxiety.

The third sense, in which it can be excessive, is in a more indirect way, which is defined in terms of how it is impacting on other areas of the person’s life rather than just the distress itself, such as the person’s relationships, ability to work and ability to function in daily activities.

Phenomenology of Excessive Reassurance Seeking Across Various Anxiety Problems

The literature on the phenomenology of excessive reassurance seeking has generally failed to consider the multiple components that are involved in persistent reassurance seeking. Typically its analysis is focused entirely on the *seeking* of reassurance while other interpersonal components involved such as *getting* reassurance, the processing of it, and the possible impact of reassurance seeking on the person providing the reassurance are left out or receive much less

attention. It is argued here that these are all very important components that have profound implications both for the way reassurance seeking is conceptualized and how it is dealt with in psychological or psychiatric treatments. Currently we do not understand exactly how these different components (*seeking* versus *getting* reassurance versus its *impact*) work and whether they are all equally important in maintaining and/or worsening the problem. This is a key issue that needs to be addressed. The repeated failure to address this issue and not looking more broadly at ERS is unfortunate and unlikely to provide the increased understanding needed of this debilitating and complex behaviour. The studies presented here will start to fill this gap.

Excessive Reassurance Seeking and DSM

A useful starting point for reviewing the phenomenology of reassurance are the most recent Diagnostic and Statistical Manuals of mental disorders, i.e. DSM-IV (American Psychiatric Association, 1994), DSM-IV-TR (American Psychiatric Association, 2000) and finally, DSM 5 (American Psychiatric Association, 2013). Quite surprisingly, the concept rarely appears in DSM, although empirical studies and clinical experience suggest that reassurance plays a significant role in the maintenance of different emotional disorders. In fact, both the most current version of the manual and the previous editions suggest that reassurance is mostly confined to one particular disorder (in diagnostic terms), which is health anxiety. It gets mentioned in relation to other common anxiety problems but to a much lesser extent. The following section explores DSM's writings on reassurance in health anxiety and OCD (where reassurance seeking is, by definition, a key feature) and briefly in other anxiety problems.

Health Anxiety

Health anxiety (historically also known as hypochondriasis) as a diagnostic construct has always been controversial. Debate continues as to whether it is best seen as a somatoform disorder as classified in DSM-IV, DSM-IV-TR and DSM-5 or as an anxiety problem like some cognitive behavioural theorists have argued for (e.g., Rachman, 2012; Salkovskis & Warwick, 1986; Warwick & Salkovskis, 1990). Some interesting changes were made in the most recent publication of DSM; individuals previously diagnosed with hypochondriasis are now either diagnosed with somatic symptom disorder or illness anxiety disorder. The latter criterion is meant to subsume those with high health anxiety in the absence of somatic symptoms or of very mild intensity of such symptoms. The authors seem to have taken into account arguments for conceptualising the problem as an anxiety disorder but not to its full; confusingly, the manual now states that illness anxiety can either be considered as a somatic symptom disorder or as an anxiety disorder.

Nonetheless, all recent DSM manuals state more or less that the main features of health anxiety are a preoccupation with fears of acquiring, or the belief that one has a serious medical condition

such as a chronic life-threatening disease. For current purpose, it is particularly interesting that DSM-5's predecessors made reassurance seeking a specific diagnostic criterion: "the preoccupation persists despite appropriate medical evaluation and reassurance of good health" (American Psychiatric Association, 2000, p. 507). As mentioned elsewhere (Salkovskis & Warwick, 2001) the hidden implication of this specific criterion is that reassurance has not only to have been sought and provided, but also to have failed to work. In other words, the DSM-IV/DSM-IV-TR uniquely (in comparison with other disorders) describes a sequence where a person not only seeks reassurance, but also gets it, and then does something with it, i.e. disregards it. However, as said earlier it is as yet unclear whether it is the whole sequence that is problematic or its individual factors. Although the criteria is somewhat helpful it also raises a number of issues as pointed out by Salkovskis and Clark (1993). First, it is very unclear what is exactly meant by *appropriate* medical reassurance. How is it different from 'ordinary' reassurance and are, for example, physical examinations more appropriate than simply giving verbal information when offering patients reassurance? Second, not all patients have access to medical professionals. Third, there is evidence that some people directly avoid seeing doctors due to health worries (Salkovskis & Warwick, 2001). Fourth, people with severe health anxiety seek reassurance not only from doctors as they often approach other people and sources such as medical books or the Internet. Perhaps due to these reasons, the significance of reassurance as a specific diagnostic criterion disappeared with the publication of DSM-5, although these are just speculations. However, when describing the diagnostic features of the disorder, the manual still states that health anxious patients are unresponsive to 'appropriate medical reassurance'. Although, it is still unclear what is exactly meant by this, there have been some positive developments. For example, the manual correctly states that doctor's reassurance may in fact have a counter-productive effect on people's concerns, and secondly it highlights that reassurance seeking is not only sought from doctors, but also from family members and friends.

Obsessive Compulsive Disorder

The main features of OCD as a diagnostic criterion remained more or less the same in DSM 5. Obsessions are defined as recurrent images, impulses or thoughts that occur repeatedly and are experienced as intrusive, inappropriate and distressing. Typical examples include fears of contamination, doubts and aggressive impulses. The obsessions are not considered simply as excessive worries about real life problems. Compulsions on the other hand are the ritualistic and deliberate behaviours that the person feels driven to perform in response to an obsession or rigid rules (e.g., having to complete a task in a particular order). Compulsions include activities such as washing and checking and also mental acts such as praying, repeating words silently and counting. Although the compulsive behaviour is aimed at reducing distress or preventing the feared

negative outcome, they are clearly excessive and not connected in a realistic way with what they are designed to prevent.

Excessive reassurance seeking is not a DSM-5 diagnostic criterion for OCD; in fact it barely gets mentioned, apart from stating under 'differential diagnosis' that: "...repetitive requests for reassurance can also occur in anxiety disorders" (American Psychiatric Association, 2013, p. 241). DSM-IV and DSM-IV-TR (American Psychiatric Association, 2000) gave the concept a slightly more attention: "the most common compulsions involve washing and cleaning, counting, checking requesting or *demanding assurances*, repeating actions and ordering " (American Psychiatric Association, 2000, p. 457 [emphasis added]) . There are two things that are worth highlighting: firstly, the word assurance was used instead of *reassurance* perhaps underestimating the pathological nature of the behaviour. Secondly, it seems that the limited attention reassurance was given in DSM-IV has now been completely removed in the newest version of DSM. Why the concept receives so little attention in the OCD section remains a mystery and the decision to do so seems to have been made without any empirical evidence to back that up.

Leaving that aside, it appears that DSM did at some point correctly consider reassurance as a type of compulsive behaviour. Interestingly, DSM defines compulsions in terms of what the person *does* but there is no mentioning of what the effect is; i.e. the definition of an obsessive checking ritual states that the person engages in checking behaviour but not that she or he feels better or worse afterwards. In relation to excessive reassurance seeking this is important because as we shall see later persistent reassurance seeking has strong similarities to compulsive checking rituals and there are good arguments for conceptualising it as a special type of checking behaviour (Rachman, 2002; Salkovskis, 1985, 1999). Thus, if we consider ERS as a compulsive behaviour and take the DSM definition of compulsions as granted it suggests phenomenological differences in ERS between OCD and health anxiety, because in OCD it focuses entirely on the *seeking* of reassurance while other components like seeking of a *response* are not considered as important as in health anxiety. There are reasons to doubt DSM's suggested phenomenological differences in ERS between OCD and health anxiety. To the contrary, it is argued here that when reassurance is perceived as ambiguous or untrustworthy (e.g., due to hesitant tone, certain facial expressions etc.), within the context of OCD, it is less effective in dealing with the perception of threat and the associated anxiety compared to 'trusting' reassurance, which advocates quite strongly that the act of seeking reassurance is not actually enough as the quality of the response matters (Parrish & Radomsky, 2011) (this is further discussed in chapter 3 and 4).

Other Anxiety Disorders

Reassurance seeking is not a diagnostic criterion for any anxiety disorder in the fifth edition of DSM. However, the behaviour is commonly associated with GAD in the manual, but barely gets mentioned in relation to other anxiety problems, although there is recent evidence suggesting that it features in panic disorder (Onur, Alkin, & Tural, 2007) and social anxiety (Heerey & Kring, 2007). It should be noted, that the author of this thesis is not arguing that ERS should be a diagnostic criterion for all anxiety problems. He is merely pointing out DSM's oversight in discussing ERS within the context of various emotional problems and the risks of confining it merely with a single disorder, i.e. health anxiety. Before leaving this discussion about DSM's shortcomings it is theoretically interesting to examine how DSM-IV-TR manual states that: "Some [panic patients] fear that the attacks indicate the presence of an undiagnosed, life-threatening illness (e.g., cardiac disease, seizure disorder). Despite repeated medical testing and reassurance, they may remain frightened and unconvinced that they do not have a life-threatening illness" (American Psychiatric Association, 2000, p. 434). This description of reassurance seeking sounds very familiar to the diagnostic criterion for reassurance seeking in health anxiety and appears to incorporate the same components, i.e. *seeking* reassurance and *getting* reassurance and then doing something with it. Additionally, it states: "...they *may* remain frightened and unconvinced that they do not have a life-threatening illness" (American Psychiatric Association, 2000, p. 434 [emphasis added]). The choice of words here, i.e. 'may', is interesting and raises the question whether the authors are suggesting that reassurance may in some instances serve a helpful cause within emotional problems; i.e. to change illness beliefs. This remains an empirical question.

Why is Excessive Reassurance Seeking Important?

Prior research has demonstrated a number of long-term detrimental effects associated with excessive reassurance seeking in the context of many emotional disorders. For example, this behaviour has been suggested to contribute to interpersonal difficulties among clinically depressed individuals (Coyne, 1976b; Parrish & Radomsky, 2010) while in health anxiety it contributes to unnecessary medical consultations and treatment, resulting in increased cost and burden on the health care system and maintenance of the problem (Salkovskis & Warwick, 1986; Salkovskis et al., 2003; Tyrer et al., 2014; Tyrer et al., 2011). In individuals with OCD, repeated requests for reassurance are particularly common where patients may repeatedly ask whether something is clean, whether they have done something wrong and in some cases request others to provide reassurance by watching them perform their rituals (Kobori & Salkovskis, 2013; Kobori et al., 2012). Although ERS is generally accepted as a common problem in clinical populations, the link between excessive reassurance seeking and emotional disorders is poorly understood. The current leading thinking comes from a cognitive behavioural perspective where Salkovskis (1985,

1999) and Rachman (2002) suggest that reassurance seeking is very similar to obsessional checking in OCD, where the main difference between physical checking and reassurance seeking lies in the fact that it has a major interpersonal aspect. Because of these seeming similarities between compulsive checking and excessive reassurance seeking, the latter is routinely targeted in Exposure Response Prevention treatments (Salkovskis & Warwick, 1986), which works either by encouraging the patient to stop seeking any reassurance (e.g. from carers) or simply stopping all reassurance provision (e.g. family members are instructed to refrain from offering any reassurance). However, this treatment intervention is used despite the fact that little if any experimental work has been carried out to examine whether ERS really is a type of compulsive checking. Furthermore, clinical experience suggests that the above mentioned treatment interventions are very hard to follow, both for clinicians and people close to the sufferer (e.g. family members, partners etc.), given the complexity and subtleness of the behaviour, often leading to problems in treatment and relationships. An investigation of factors that contribute to ERS is clearly warranted, since only by studying ERS further can researchers and clinicians identify optimal methods to challenge this complicated behaviour. The experimental analysis provided in the subsequent chapters of this thesis will hopefully begin to answer some of those questions.

Chapter 2:

Place of Excessive Reassurance Seeking in Cognitive Behavioural Theory

In the last 40 years we have seen how Beck's (1967, 1976) theoretical cognitive model has evolved and been refined through the contribution of extensive experimental and theoretical work (Beck & Haigh, 2014). Beck's cognitive model states that people's emotions are experienced as a result of the way in which situations or stimuli are interpreted or appraised:

Event → Interpretation of the Event → Emotional Reaction

This is thought to be a normal cognitive process, which in certain situations can become biased or distorted leading to disabling or distressing levels of emotion. The model was initially constructed to explain the psychological phenomena of depression, but over the years the model has been applied to various psychological disorders other than depression. The model, which is represented in Figure 2, postulates three sets of interrelated cognitive concepts. They are: the cognitive triad; cognitive errors; and schemas. According to Beck, all the symptoms of depression, including the physiological ones, could be understood and explained in cognitive terms as deriving from the individual's negative content of thought relating to the self, the world and the future, or what Beck refers to as the *cognitive triad*². The triad is reinforced by a number of negatively biased and observable *cognitive errors*, such as overgeneralization, all-or-nothing-thinking, and selective attention³. Furthermore, the depressed person views the world through an organized set of depressive *schemas* that are negatively toned and reflect themes of *loss* and *failure* and distort experience about self, world, and future in a negative direction (Beck, Rush, Shaw, & Emery, 1979). Beck defines schemas as cognitive structures "for screening, coding, and evaluating the stimuli that impinges on the organism" (Beck, 1967, p. 283). In simpler terms, schemas govern and guide how people make sense of or interpret their environment or experiences. But how do these schemas, also often called core beliefs, arise? According to the theory, the content of the schemas develops from interactions with the environment that occur during early development, which then automatically shape the individual's perceptions and interpretations of events, which in turn influences how he or she feels, thinks and behaves (Beck, 1995).

² Beck uses the phrase "negative view of the world" to refer to the depressed individual's negative view of his or her personal experience of the current environment, but not a negative view of the world in general.

³ When Beck first presented his model, he only mentioned four cognitive errors, but in 1979 Beck and colleagues expanded that list (see further Clark, Beck, & Alford, 1999)

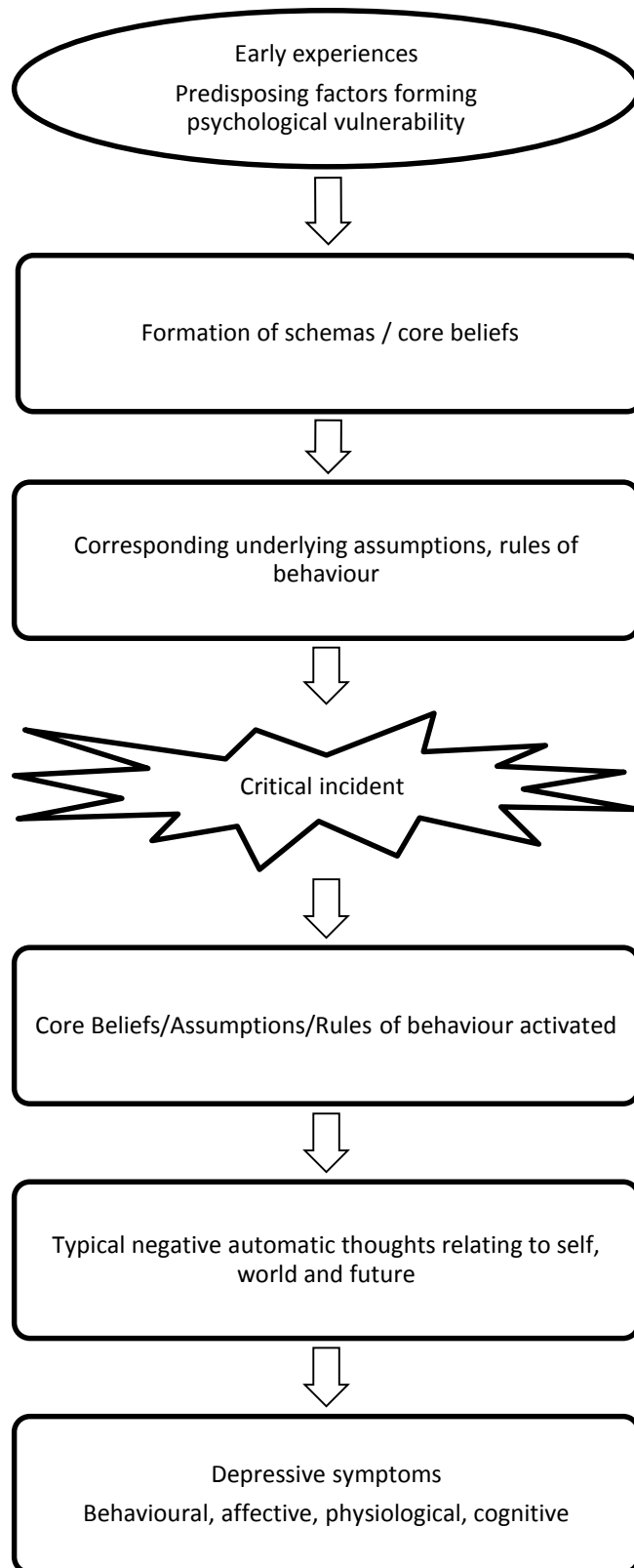


Figure 2. Beck's cognitive model of depression

Thus, if childhood experiences are characterized by violence and abuse, the negative schemas about the self (e.g. 'I am worthless') the world (e.g. 'other's abuse me and cannot be trusted'), and the future (e.g. 'my life is hopeless and will never change'), create selective attention to negative events and memories, which has the effect that the person will be more likely to detect or interpret and recall information consistent with the schemas, which in turn only strengthens them (Ingram, Scott and Hamill, 2009). The schemas then lead to specific underlying assumptions or rules of behaviour⁴ that are supposed to help the person to cope with inadequacies and fears either by compensation – that is, trying to overcome a feeling of worthlessness by exerting extra effort, or by avoidance of situations or tasks that may carry any risk of failure or rejection (Leahy, 2003). When underlying assumptions or rules of behaviour are activated, for example, by external or internal events they give rise to negative automatic thoughts, which are considered the most superficial (and observable) level of cognition and typically run through people's minds automatically and uncontrolled (Beck, 1995). These thoughts, in turn, influence the individual's emotions (e.g. angry, sad); behaviour (e.g. stay in bed); physiological symptoms (e.g. sleep difficulties); and cognitive symptoms (e.g. poor concentration) (Beck, 1995; Fennell, 1989).

The Role of Perception of Threat in the Cognitive Model

Although Beck's original cognitive model of psychopathology was initially mainly focused on depression it was not limited to it, as Beck argued that each psychiatric disorder had its distinct cognitive theme. Thus anxious and depressed individuals could be distinguished on the basis of the content of their cognitions about themselves, their future and other people. This came later to be known as 'the cognitive specificity hypothesis' which is one of the central hypothesis proposed by the cognitive model. In depression, the important interpretations, or cognitions, concern perceived loss or failure, whereas in anxiety, Beck argues that the main cognitive theme is focused on perceived physical or social threat (Beck, 1976; Beck et al., 1985). The threat may be immediate or thought to happen in the future, may involve real danger or moral consequences, may be concrete or abstract, and may be focused on self or others. In other words, anxiety will result when people *believe* that the situation they are in is in some way threatening (no matter how accurate or irrational this interpretation may seem to other people). Although this perception of threat is necessary to give rise to anxiety, other factors play a role in increasing the degree of anxiety experienced by the individual. Beck (1976) and Beck et al. (1985) argue that, as in depression, the experience of anxiety is dependent upon previous life events, the person's beliefs and assumptions they learned during an earlier stage in their life and the given situation

⁴ Cognitive therapists offer a variety of terminology to describe underlying assumptions and schemas/core beliefs. Whatever the terminology is, they all share the idea that the underlying assumptions support related schemas/core beliefs (Kuyken, Padesky, & Dudley, 2009).

the individual finds himself in (what Beck refers to as ‘schema based information processing’). Other factors include how the individual interprets threat itself and according to Beck and colleagues (1985) a core feature of *anxiety disorders* is a biased interpretation of stimuli (this can be situations, mental events or physical sensations) as threatening, where the individual systematically *overestimates* threat inherent in certain situations (e.g., social settings), bodily sensations (e.g., increased heart rate), or mental processes (e.g., intrusive thoughts). This perception of threat can arise from distorted perception of the likelihood of threat which interacts with distorted estimates of the awfulness of the threat, along with an underestimate of coping and rescue factors. Taken together the cognitive analysis of the relationships between perceived threat and the experience of anxiety can be represented as (Salkovskis, 1996b):

$$Anxiety = \frac{Perceived\ probability\ of\ threat \times Perceived\ cost\ or\ awfulness\ of\ threat}{Perceived\ ability\ to\ cope\ with\ danger + Perceived\ rescue\ factors}$$

As pointed out by Salkovskis (1996b) an important implication of the cognitive analysis of anxiety is how it is possible for a person to feel extremely anxious even in situations where threat is perceived unlikely but perception of the awfulness of the threat (if it were to happen) is perceived high. A clinical example of this could be of an OCD patient that does not believe it strongly that her children will die from some disease if she does not wash her hands, but if it were to happen the consequences would be so awful thus making it extremely important to wash excessively to prevent harm from happening. As Salkovskis (1996b) points out, it is possible to see distortions in all the above mentioned factors both across individuals and also between different anxiety disorders. It is also important to highlight that the above mentioned factors are not confined to anxiety disorders but also help to explain ‘normal’ anxiety.

Beck’s theory and cognitive treatment for depression facilitated more specific and detailed cognitive analysis of other emotional problems. In historical review, the 1980s produced significant number of disorder specific models; many of whom have stood the test of time. Most of the disorder specific cognitive models were developed from programmes of research examining factors specific to each emotional problem, how they function and how they are involved in maintenance (for a review of the evolution of cognitive behavioural therapy see Rachman, 2009; Rachman, 2015). This approach to understanding common emotional problems made treatment based on cognitive behavioural principles, in particular for anxiety problems, more efficient and effective. In fact, the National Institute for Health and Clinical Excellence (NICE; 2005, 2009, 2011, 2013) currently recommends cognitive behavioural therapy for many common emotional problems based on evidence from various randomized controlled trials showing large and enduring effect sizes (Butler, Chapman, Forman, & Beck, 2006; Tolin, 2010). Although presented as disorder specific models aimed at treating unique cognitive and behavioural

processes, they all consist of similar treatment components, so the elements are often transdiagnostic whilst the focus is disorder specific. Instead of assuming that psychological disorders are separate but correlated constructs, the transdiagnostic approach hypothesises that there is shared underlying pathology across emotional problems (e.g., Barlow et al., 2011; Craske, 2012; McManus, Shafran, & Cooper, 2010). The following section explores further the transdiagnostic approach to understanding and treating emotional problems. The discussion aims to give the reader an opportunity to explore the possibility whether ERS could potentially be an example of a transdiagnostic process which will then be further examined experimentally in later chapters of this thesis.

The Transdiagnostic Perspective on Cognitive Behavioural Theory and Treatment

The history of diagnosis specific treatments is relatively short; spanning approximately three decades. Within this context, DSM III's (American Psychiatric Association, 1980) adoption of empiricism and specificity, the merging of behaviour therapy and cognitive therapy into CBT and Clark's (1986) model of the maintenance of panic, is historically important. Clark noted that in panic disorder, something very specific was happening around people's physical sensations, i.e. catastrophic misinterpretations. Similarly, Salkovskis (1985) cognitive analysis of OCD emphasised the unique role of 'inflated sense of responsibility'. Clark's and Salkovskis' contribution to the field was considerable and has been a major influence on specific explanations of the different emotional problems (particularly anxiety) and correspondingly specific treatment interventions (Rachman, 2009, 2015). Prior to this, psychological treatment techniques were typically non-diagnostic, i.e. did not vary according to the presenting problem.

Given the success of the disorder specific CBT treatment interventions it is interesting to see how in recent years there has in some sense been a shift back to the development of transdiagnostic approaches. For example, some contemporary theorists, researchers and clinicians such as Barlow et al. (2011); Butler, Fennell, and Hackmann (2008); Fairburn, Cooper, and Shafran (2003); Harvey, Watkins, Mansell, and Shafran (2004); McManus and Shafran (2014); and Norton and Barrera (2012) have all written extensively on the topic. Furthermore, the so called 'third wave' CBT therapies, such as Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and Mindfulness Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002) are used across disorders, and more recently the Method of Levels Therapy (MLT; Mansell, Carey, & Tai, 2013) is argued by its authors to be a truly transdiagnostic therapy where all psychological distress can be explained by a single mechanism.

Although research is limited in the area of transdiagnostic treatments and particularly its theory, some convincing arguments have been put forward for its application (e.g., Norton & Barrera, 2012). They include the fact that many patients referred for psychological treatment, such as Cognitive Behavioural Treatment (CBT), have complex presentations and *comorbidity* is the norm rather than the exception (Kessler, Chiu, Demler, Merikangas, & Walters, 2005). Furthermore, the overlap in distinctive *clinical features* within the emotional disorders is both remarkable and obvious. Take for example some of the anxiety disorders such as health anxiety and panic disorder where both problems involve catastrophic misinterpretations of bodily sensations as signs of a serious medical disturbance (Warwick & Salkovskis, 1990). Health concerns are also observed in presentations of OCD, where themes of obsessions and compulsions often include recurrent obsessional thoughts about illness resulting from contaminations and compulsive washing and cleaning rituals (McKay et al., 2004; Rachman & Hodgson, 1980). Moreover, all anxiety disorders involve some degree of avoidance and/or somatic features associated with anxiety (American Psychiatric Association, 2013; Harvey et al., 2004). These shared symptoms appear to be stimulated by the same core psychopathology (at least for the anxiety disorders) that is overestimation of threat (Shafran, McManus, & Lee, 2008). However, symptoms that appear topographically similar might have *different* underlying cognitive processes linked to the focus of the perceived threat. Thus, it is important and clinically relevant to investigate whether seeming similarities among disorders are manifested at the level of cognitive processes hypothesized to underlie disorder specific symptoms (Beck et al., 1985).

The 'transdiagnostic' approach to conceptualising psychological problems hypothesizes that rather than existing separately, there are a range of cognitive and behavioural maintenance processes shared across different psychological disorders, that is processes that are elevated in a wide range of disorders relative to healthy controls and that may *causally* contribute to the development and/or maintenance of symptoms (Harvey et al., 2004). Within CBT, researchers have identified a range of processes, such as: attention, memory, thinking, behaviour, reasoning (Harvey et al., 2004) and negative repetitive thinking (Ehring & Watkins, 2008). In treatment terms this means that specific therapy interventions (e.g., modifying inflated feelings of responsibility; dealing with excessive reassurance seeking; dropping safety-seeking behaviours; increase tolerance of uncertainty) that traditionally belong to disorder specific treatment models may be used more broadly as ways of treating emotional problems. Although it appears that there are obvious practical benefits to the transdiagnostic perspective it is argued here that the field has embraced it as an opportunity to put together 'treatment packages', which include all kinds of treatment interventions derived from disorder specific manuals, while experimental- and theoretical analysis of transdiagnostic processes has suffered greatly. Furthermore, by reading the literature and as pointed out elsewhere (e.g., Bird, Mansell, Dickens, & Tai, 2013; Mansell, 2008) it

is unclear what is really meant by the concept *transdiagnostic process* and there seems to be no agreed definition. For example is ‘transdiagnostic’ something that takes place in *all* emotional disorders as opposed to things which cut across one or two disorders? And then, if we find something that occurs in two disorders, does that make it transdiagnostic or is the diagnosis maybe at fault? Furthermore, the fact that treatment interventions generalise across diagnoses does not necessarily mean that they address transdiagnostic processes, as the mechanism of change cannot be inferred from treatment outcome. Treatments are by definition multi-component, and a treatment intervention which shows significant improvements for both *Problem A* and *Problem B* might be doing so because it addresses transdiagnostic *Process X*. Alternatively, it could be addressing *Process Y* in *Problem A*, and *Process Z* in *Problem B*. These issues cannot be resolved by treatment studies alone. Currently, research is lacking in matching transdiagnostic treatments with specific psychological processes and more work needs to be done to identify the precise shared and specific cognitive and behavioural processes.

Reassurance Seeking as a Transdiagnostic Process

The current literature on transdiagnostic processes typically defines the concept as something that occurs across different diagnoses and is also either a risk factor or a maintaining mechanism of multiple emotional disorders (Egan, Wade, & Shafran, 2011; Harvey et al., 2004). For current purposes it is important to highlight that transdiagnostic processes (as defined above) are defined *without any reference to their intended meaning or consequences*. It is argued here that without considering motivational factors the definition becomes over-inclusive and consequently limits its value for theoretical and clinical development.

Before discussing *how* transdiagnostic processes should be defined, let us revisit the cognitive model as it is this model that will be applied here transdiagnostically. The hallmarks of the cognitive and behavioural approach are the way it uses cognitive factors to integrate cognitive, affective, behavioural and physiological processes to explain emotional problems. At the heart of all this, is meaning, or more specifically *negative meaning*. Negative meaning then elicits negative emotions. However, key to the maintenance of these negative meanings are behavioural reactions and particularly what we understand to be safety-seeking behaviours, for example, reassurance seeking (Salkovskis, 1991, 1996b).

Reassurance seeking is obviously a complex behaviour; empirical studies and clinical experience suggest that it is commonly found across many different emotional disorders and there is also a strong argument for it being a maintenance factor in a wide range of emotional problems (Abramowitz & Moore, 2007; Kobori & Salkovskis, 2013; Parrish & Radomsky, 2010; Salkovskis & Warwick, 1986). From the discussion above about its different components (seeking vs. getting vs.

receiving/processing) it is clear that there are particular features (and probably some function) of reassurance that are involved (shared) across all disorders, for example, the interpersonal components, how people approach other's for reassurance (e.g. asking direct questions, seek it in hidden ways), what effect it has on people, and for what reasons people seek it and so on. In that sense, one could argue given Harvey and colleagues definition (2004) that reassurance seeking is a truly transdiagnostic process. However, it is suggested that the mistake that we can make with the transdiagnostic approach is to include everything that *looks* the same as transdiagnostic. In terms of reassurance seeking; it truly looks very similar across different disorders but what is less clear and less defined across disorders is what the cognitive processes involved might be; that is both the factors involved in motivating or generating reassurance, and the consequences of the reassurance on the motivating processes. In other words when a person with OCD and some other person with panic disorder seeks reassurance by asking exactly the same question: "am I going to die?"; the meaning/intentionality/reason might be completely different; the panic patient might wish for an ambulance to be called if it is a heart attack versus the responsibility (blame) being shared or even removed by making someone aware of the threat (OCD), or even in hope they will do so in a depressed person. This is a key point when considering transdiagnostic processes; they may be clearly transdiagnostic in form but only superficially transdiagnostic in content. For instance, we all understand that a person might avoid dogs for various reasons; for example he or she fears that dogs might bite and kill people; or alternatively that dogs spread dangerous diseases and being around them makes one responsible for spreading contamination to family members and killing them; or alternatively due to allergies. The end result is the same: avoidance of all dogs but for different reasons.

Thus the author believes that it is important to incorporate *meaning* into definitions of transdiagnostic processes. In terms of reassurance, it might be that meaning is clustered by diagnoses. For example, it will be argued in this thesis that reassurance functions similarly in OCD and health anxiety relative to other anxiety disorders, for example, panic disorder. However, this is an empirical question that will be addressed further in the following chapters.

Factors Involved in the Maintenance of Emotional Disorders: Safety-Seeking Behaviours

As previously discussed the cognitive model states that people suffer from anxiety disorders because they believe situations are more dangerous than they really are. This raises interesting questions about why people who are regularly exposed to what they fear without any harm coming to them, do not learn from experience that their fears are groundless or less serious than they believe them to be (Clark, 1999; Salkovskis, 1996b). One of the most clinically and theoretically important discoveries was made by Salkovskis (1991) who hypothesised that people

with emotional problems fail to learn that what they fear is groundless (or less serious), even if they expose themselves to what they fear, because they take unnecessary precautions, i.e. they engage in Safety-Seeking Behaviours (SSBs) to prevent the bad things they fear from materialising and consequently do not discover that their negative predictions are inaccurate or all together wrong. The section that follows offers a detailed analysis of Salkovskis' hypothesis about safety-seeking behaviours and recent developments within that field. Although there is considerable evidence that other maintenance factors, such as memory biases; imagery; selective attention to threat relevant stimuli; physiological arousal; worry and rumination; and emotional reasoning are equally important in the maintenance of emotional problems (Clark, 1999), it is argued here that none of them is as related to excessive reassurance seeking as safety-seeking behaviours.

Safety-seeking

The perception of threat generates a range of reactions, including behavioural reactions. It is of course normal to attempt to reduce danger and thereby make one feel safe. Safety-seeking behaviour can take many different forms, including internal processes as well as observable actions. Safety-seeking is far from being pathological. For example, running away from an attacking dog or wearing protective clothing when handling harmful chemicals would normally be considered an adaptive response where real threat is concerned. However, in anxiety problems, where the concern is based on a perceived threat, as opposed to a real threat and in addition an underestimation of the ability to cope with the threat, then safety-seeking tends to cause more problems than solutions (e.g., Salkovskis, 1991).

Background

The notion that behaviour plays an integral part in the *maintenance* of anxiety emerged during the 1950s with the development of behaviour therapy. An important contribution was offered by Mowrer's (1939) two-stage theory of fear and avoidance; the first stage involved the acquisition of fear (symptom development) via classical conditioning of a fear response to previously neutral stimuli (e.g. an individual might develop contamination OCD following a serious illness). The second stage was the emergence of avoidance behaviour (symptom maintenance). In other words, Mowrer assumed that escape and avoidance reduced feelings of anxiety having the paradoxical effect of maintaining the anxiety. Mowrer's theory had important implications for the development of behaviour therapy, as it provided a platform to explain both the genesis and maintenance of anxiety and avoidance behaviour. However, inadequacies of the theory gradually became apparent. The theory's main weakness were its overemphasis on fear as a motivating factor in human behaviour; people engage in avoidance for various reasons (other than fear) such as disgust, boredom or convenience, and avoidance can also function as a way to feel safe (see further Rachman, 1976b, 2009; Rachman & Hodgson, 1980). The cognitive analysis of the

persistence of emotional problems emerged some decades later and was (and still remains) extremely influential.

The Cognitive Approach

In 1991, Salkovskis published his cognitive analysis of the role of *Safety-Seeking Behaviour* (SSB), adding a new perspective on how anxiety might be maintained despite disconfirming evidence. Salkovskis defined safety-seeking behaviour as overt or covert avoidance of feared outcomes (perceived threat) that is carried out within a specific threat related situation. This includes *avoidance* of exposure to the feared situation; *escape* from such situation; and SSB carried out *in the situation* when escape is not possible with the intention of preventing (or dealing with) the feared consequences (Salkovskis, 1996b). It is crucial to stress the point that it is not the behaviour itself that defines safety-seeking behaviour, but the behaviour along with the intention of making oneself safe. According to Salkovskis, SSBs are problematic because they maintain emotional problems by preventing people from gaining information that disconfirms their inaccurate threat beliefs. This effect is clearly illustrated in the following clinical examples: A person with contamination OCD who believes that they will put themselves in physical danger if they touch something dirty may obsessively wash their hands whenever they feel contaminated. When their anxiety passes and their fears do not come true, they are likely to consider the situation a 'near miss' and to attribute the non-occurrence of the feared event to their preventive efforts (in this case the hand washing), thereby reinforcing their inaccurate threat beliefs, predictions and behaviour. Similarly, a client with social phobia who avoids all social contact due to fears of making a fool of himself will not have the opportunity to test the validity of this prediction and to learn that they are fully capable of having a 'non-foolish' conversation with other people.

It is also hypothesised that some safety-seeking behaviours paradoxically exacerbate feared symptoms and consequently increase feelings of anxiety (Salkovskis, 1996b; Wells et al., 1995). For example, when a panic patient tries to control his breathing (e.g. take repeated deep breaths) he or she can bring on (or make worse) the feared physical symptoms. Also, thought suppression or other neutralization strategies tend to bring on further intrusive thoughts for OCD patients. In addition it has been hypothesized that SSBs interfere with threat reappraisal because of unhelpful attention factors. In other words, when individuals implement SSBs their attention is mainly focused on the availability and execution of SSBs, diverting attention away from disconfirming information (Powers, Smits, & Telch, 2004; Sloan & Telch, 2002).

Empirical Support for the Cognitive Account of Safety-Seeking Behaviour

Key studies published by the so called 'Oxford Group' have provided empirical support for the hypothesised detrimental effects of safety-seeking behaviours. In the first questionnaire study exploring SSBs in panic patients, Salkovskis, Clark, and Gelder (1996) demonstrated that consistent with the SSB hypothesis, panic patients' choice of SSBs are logically related to what they fear. In other words, the panic patient who fears fainting typically tries to hold on to something or sit down to prevent collapsing as opposed to moving around and/or relaxing his/her legs. In terms of experimental data, studies have demonstrated the superiority of instructing patients to drop SSBs during exposure based tasks. In a single case series of socially anxious patients, Wells et al. (1995) provided participants one session of exposure alone and one session of exposure plus decrease in SSBs under cognitive rationale. As predicted by the SSB hypothesis, the latter intervention was found to be more effective in terms of decreasing participants' levels of anxiety and threat beliefs. Similar findings are reported by Salkovskis, Clark, Hackmann, Wells, and Gelder (1999) who recruited 18 participants with a diagnosis of panic disorder with agoraphobia and instructed them to either drop or maintain their SSBs during exposure session. The same group of researchers replicated the study (but this time extended the time of the exposure) and confirmed the superiority of instructing patients to drop their SSB under a cognitive rationale over pure exposure (Salkovskis, Hackmann, Wells, Gelder, & Clark, 2007). Similar findings have emerged from several other investigations outside the Oxford Group (see for example Kim, 2005; Morgan & Raffle, 1999; Sloan & Telch, 2002).

The concept of SSB was quickly incorporated into various cognitive models and had a significant impact on how clinicians and theorists (both then and now) treat and think about emotional disorders. Currently most (if not all) CBT models and theories include SSBs as an integral part in the maintenance of emotional problems. The concept is no longer confined to anxiety disorders and has been reported to be an important factor in problems such as psychosis (e.g., Gaynor, Ward, Garety, & Peters, 2013), eating disorders (Fairburn, 2008) body image problems (Veale, 2004) and even in physical health problems such as chronic pain (Tang et al., 2007). Given the negative role of SSBs, CBT treatments tend to focus on gradually dismantling these behaviours and helping patients set up experiments to test out or challenge their beliefs (Clark, 1999). For example, patients attending CBT treatment for panic disorder, sometimes report carrying benzodiazepines in their pockets to prevent their feared catastrophe from occurring. Equally, patients with contamination OCD typically report compulsive washing to prevent harm coming to themselves and/or other people. In both instances, the SSB (carrying medication or hand washing) prevent the patients from disconfirming their threat belief/s, and also from learning that if the feared catastrophe happened, they may be well able to cope with it. Within a CBT context, an

important treatment intervention for these individuals would be to help them to recognise and inhibit the safety-seeking behaviour typically facilitated within the context of behavioural experiments (Bennett-Levy et al., 2004).

Safety-Seeking Behaviour: Reconsideration of a Reconsideration

It is undoubtedly the case that SSBs, particularly in the context of emotional problems, can be very unhelpful. This is both supported with empirical research and clinical experience (e.g., Olatunji, Etzel, Tomarken, Ciesielski, & Deacon, 2011; Salkovskis, Clark, et al., 1999; Salkovskis et al., 2007; Wells et al., 1995). However, in recent years we have witnessed increased publication of papers suggesting something different; that SSBs may not necessarily be universally detrimental and are actually helpful insofar as they help patients to seek out information that could potentially disconfirm their irrational fears. A particularly important contribution for this view comes from Rachman, Radomsky and Shafran, who published a paper in 2008 named: 'Safety behaviour: A reconsideration'. To prevent any confusion it should be noted that the terms *safety-seeking behaviour* and *safety behaviour* have been used interchangeable in the CBT literature (this will be discussed further below). In the paper, the authors state: "It remains to be demonstrated that safety behaviour always, or almost always, strengthens avoidance behaviour. Similarly, there is no evidence that safety behaviour necessarily prevents disconfirmatory experiences" (p. 169). They then argue that the *judicious use* of safety behaviour may be entirely appropriate under certain circumstances and at various phases of treatment, for example, during the early stages of graded exposure or during demanding homework tasks. They also talk about the current problems with high treatment drop-outs or refusals, and suggest that careful use of safety behaviours might make treatments more tolerable and/or acceptable to patients.

Various pieces of evidence support the suggestion that there might be times when the careful use of safety behaviour might be beneficial and facilitate treatment. In support of this view, Bandura, Jeffery, and Wright (1974) demonstrated experimentally that the use of "supportive aids and protective controls" (p. 56), for example, wearing gloves or having the therapist hold a snake firmly in his hands was effective in overcoming snake phobia. In fact, greater fear reduction was recorded for those participants who relied on more aids compared to those who were minimally aided. Further support comes from experimental work on agoraphobia carried out by Rachman and colleagues in the 1980s where it was demonstrated that instructing agoraphobic patients to escape from feared situations under high perception of threat improved to the same extent as those who received standard exposure (De Silva & Rachman, 1984; Rachman, Craske, Tallman, & Solyom, 1986). A more recent study (Milosevic & Radomsky, 2008) assigned snake fearful participants either to exposure condition or an exposure plus safety gear condition in which participants could access protective clothing for use during exposure based treatment. Results

indicated that the safety behaviour group approached the snake at a faster rate than did the control group, and no differences were found between the groups in terms of treatment gains, i.e. changes in fear, maladaptive cognitions and proximity to the snake. Using a similar manipulation Hood, Antony, Koerner, and Monson (2010) reported *equal* (i.e. no reliable benefits or drawbacks from using safety behaviours) treatment gains for spider fearful participants assigned either to exposure with safety behaviour or exposure alone. Similar findings have been reported for the treatment of claustrophobic fears (Deacon, Sy, Lickel, & Nelson, 2010; Sy, Dixon, Lickel, Nelson, & Deacon, 2011). Finally, a similar study procedure was applied to contamination fears in a subclinical sample, where the presence of safety behaviour (in this case participants were told to clean their hands with hygienic wipes after touching contaminated items) did not prevent a reduction in feelings of fear, contamination, disgust or danger (Rachman, Shafran, Radomsky, & Zysk, 2011; van den Hout, Engelhard, Toffolo, & van Uijen, 2011).

How Do We Solve These Seemingly Conflicting Findings?

Some clinicians and researchers have interpreted these findings as strong evidence for a reconceptualization of the impact of safety behaviours in in-vivo exposure, while others have taken a calmer stance and called for additional research on the theoretical propositions offered by Rachman and colleagues regarding the potential benefits of the careful use of safety behaviours. Although many of the studies above offer a refreshing approach to examining safety behaviours it is important to note that some attempts to experimentally validate the suggested *advantages* of the use of safety-seeking behaviours have failed (e.g., Deacon et al., 2010). In addition, it is argued here that the studies all have one problem in common, and that is their failure to incorporate or explore the concept of intentionality. In other words, they do not take into account the participant's goals and motivational context. In some respect the problem relates to the interchangeable use of the terms *safety behaviour* and *safety-seeking behaviour*, which has caused serious confusion. Note that according to Salkovskis (1991) definition of safety-seeking behaviour, the behaviour is defined with reference to its intended purpose; it is the *seeking* of safety. This is a crucial point, and perhaps overlooked in the studies mentioned above. If we reconsider Milosevic and Radomsky (2008) study on snake phobia, it is entirely unclear what the participants were afraid of and/or what they are intending to do (getting closer to the snake for curious reasons versus approaching the snake because they were told to do so versus approaching it because they want to overcome their snake fears). What were their personal threat beliefs in relation to the snake? Furthermore, we have no information as to what the safety gear meant to them. Did they believe that without it their feared catastrophe might happen, or did it simply help them to *approach* the threat which then facilitated the acquisition of corrective information? It is argued here that when the participants put on the protective clothing and

approached the snake their intention was not to seek safety; their intention was to pick the snake up with the help of the safety gear, that is, approach the threat. Equally in the contamination experiments by van den Hout et al. (2011) and Rachman et al. (2011), it is questionable whether the participants believed that unless they cleaned their hands, with the hygienic wipes, something terrible might happen. In other words, we do not know whether they were seeking safety to prevent a feared catastrophe when they cleaned their hands or whether they were able to approach and touch the contaminants simply because they knew that they could clean their hands afterwards.

Also, in a recent paper Volders, Boddez, De Peuter, Meulders, and Vlaeyen (2015) argue that implementing safety-seeking behaviours in exposure based treatments can be challenged from a learning theory perspective. The authors' arguments are not described in any detail here due to lack of space, but for current purposes it is important to highlight that there does exist literature suggesting that during Pavlovian extinction (exposure therapy is essentially a Pavlovian extinction based intervention) the presence of safety-seeking behaviours are thought to preserve/protect the value of the conditioned stimuli as a danger signal. Members of the same research team have published interesting findings where they showed experimentally the protective effect of a safety-seeking behaviour on fear of movement-related pain (Volders, Meulders, De Peuter, Vervliet, & Vlaeyen, 2012).

However, it is still entirely true that some 'safety behaviours' (as they are referred to above) are helpful, but it is perhaps a misnomer to call them safety behaviours (and probably wrong to think of them as safety-seeking behaviours) simply because their intended use is not about seeking safety from harm. We must not be fooled by topography. Perhaps a better term is 'approach supporting behaviours' – where the intention is to facilitate approach or confrontation to the feared situation even if escape is possible (Salkovskis, 2013). In fact, approach supporting behaviours have always been part of psychological treatments, including cognitive and behavioural approaches. For example, when doing exposure tasks with patients, it is not unusual for the therapist to say a joke to distract the patient a bit, or even model the behaviour the therapist wants the patient to do (although unlikely in the case of a psychoanalyst, but a CBT therapists might lick the sole of his shoe in the early stages of treatment for contamination OCD before asking the patient to self-contaminate). Equally, the therapist might encourage the patient to seek support from their partner in the initial stages of graded exposure. In a way this is all done to make the treatment a bit easier for the patient. But this is not to say that these are necessarily forms of safety-seeking behaviours. Differentiating between the both is of critical clinical importance, but it involves a careful cognitive approach, not a behavioural, as it is entirely based on the individual's intention.

Excessive Reassurance Seeking as a Safety-Seeking Behaviour

Theory

Salkovskis has argued that excessive reassurance seeking plays a maintaining role in OCD (e.g., 1985, 1996b, 1999) and health anxiety (Salkovskis & Warwick, 1986; Salkovskis et al., 2003) in the form of safety-seeking behaviour. More specifically he suggests that from a cognitive perspective ERS is best conceptualised as a special type of compulsive checking behaviour, a form of verification (as opposed to restitution as in the case of cleaning compulsions) motivated by the perception of threat and is an attempt to achieve safety and share or dilute the responsibility for harm. More recently Kobori et al. (2012) coined the term 'super safety-seeking behaviour' to reflect this hypothesised added element which reassurance seeking is thought to carry (at least within the context of OCD and perhaps also health anxiety) in comparison with other common SSBs, i.e. the sharing/removal of responsibility. Defined as a SSB, excessive reassurance seeking has the effect of maintaining preoccupation and preventing the individual from experiencing disconfirmation of the feared consequences. Salkovskis (1996b) speculated, that ERS is more prominent and pervasive in OCD and health anxiety compared to other emotional disorders, because both involve a fear of delayed consequences (e.g., cancer), whereas other problems such as panic disorder involve immediate threats (e.g., heart attack). Consistent with this view, it is more likely that ERS will occur as a safety-seeking behaviour in health anxiety and OCD, as opposed to more immediate attempt to avert the disaster such as escaping from the situation or seeking safety within the situation itself (Salkovskis, 1996).

Responsibility plays a crucial role in Salkovskis (1985) cognitive behavioural approach to OCD. The theory proposes that people suffering from obsessions do so because they make particularly negative appraisals of intrusions and/or other mental activity. In particular, the person interprets the occurrence and/or content of such intrusions as indicating harm to themselves and/or others for which the person is *responsible*⁵ for preventing or undoing. A crucial aspect of this theory is that it is this *perception of responsibility* which evokes distress and motivates the person to engage in compulsions to suppress or remove the unwanted intrusions and to attempt to prevent any harmful events associated with it – helping the obsessional problem initially to develop and then to thrive (Salkovskis, Forrester, Richards, & Morrison, 1998). Since Salkovskis publication of the cognitive behavioural theory of OCD, there has been growing research literature (including experimental analysis) supporting the hypothesised role of responsibility in obsessional problems (see further Arntz, Voncken, & Goosen, 2007; Coles, Schofield, & Nota, 2014; Ladouceur, Léger,

⁵ It should be noted that the cognitive approach to understanding obsessional problems uses the concept of *responsibility* in a specific way and the theoretical construct is not identical to everyday usage (see further Salkovskis, Shafran, et al., 1999).

Rh      , & Dub  , 1996; Ladouceur, Rh      , & Aublet, 1997; Ladouceur et al., 1995; Lopatka & Rachman, 1995; Radomsky, Rachman, & Hammond, 2001; Salkovskis, Shafran, et al., 1999; Salkovskis et al., 2000; Shafran, 1997).

Rachman (2002) takes a similar stance towards ERS and conceptualises repeated requests for reassurance as a form of 'checking by proxy'. Like Salkovskis (1985), he argues that OCD-related neutralization behaviour, compulsive checking and ERS share common features; they are all strategies aimed at reducing the probability of a negative event, the effects of the event, or one's perceived responsibility for the negative event. It is of note that both Salkovskis and Rachman have only defined ERS within the context of two emotional problems, i.e. OCD and health anxiety. Both argue for the same motivational factors which drive the behaviour, that is, perceived threat and responsibility. However, in contrast to Salkovskis, Rachman (2012) has talked about a third motivational factor (although it is unclear whether this only applies to health anxiety), i.e. the reduction in anxiety. Finally, both hypothesise that ERS shares the same functional and long-term characteristics as compulsive checking or other safety-seeking behaviours: it prevents disconfirmation of the threat related belief and allows for temporary reductions in the associated negative feelings when reassurance is provided.

Rachman's (2002) paper on the cognitive theory of compulsive checking elegantly explains why and when checking becomes compulsive and why checking behaviour persists. In brief, compulsive checking occurs when people (who have enduring tendency towards an inflated sense of responsibility) feel unsure that a perceived threat has been adequately dealt with, i.e. either removed or prevented. In their attempts to achieve certainty about the absence or unlikelihood of danger, people with high responsibility engage in repeated checking, which paradoxically, elicits negative feelings, and a vicious circle is established. Rachman identifies compulsive checking as a self-perpetuating mechanism where certain elements help to reinforce the behaviour⁶: i) checking has no natural terminus because achieving full certainty about the prevention of future events is impossible; ii) repeated checking affects memory confidence, the more you check the less certain you become; iii) compulsive checking increases perceived danger: iv) and it also increases perceived responsibility although the person is intending for the opposite. Rachman also identified three cognitive factors or 'multipliers' which interact to increase or decrease the checking behaviour: perceived responsibility to prevent harm; perceived probability of the feared event happening; and the perceived awfulness/cost/severity if the dreaded event took place. Changes in any one of these factors can decrease or increase the compulsive behaviour (see further Rachman, 2002). Since its publication, Rachman's cognitive theory of

⁶ In his paper, Rachman (2002) identifies four elements, but acknowledges that there may be more.

compulsive checking has gained considerable empirical support, with a number of cleverly designed studies showing that the factors identified operate as proposed (Alcolado & Radomsky, 2011; Cuttler, Sirois-Delisle, Alcolado, Radomsky, & Taylor, 2013; Dek, van den Hout, Giele, & Engelhard, 2010; Harkin & Kessler, 2009; Radomsky & Alcolado, 2010; Radomsky, Dugas, Alcolado, & Lavoie, 2014a; Radomsky, Gilchrist, & Dussault, 2006; van den Hout, Engelhard, de Boer, du Bois, & Dek, 2008; van den Hout & Kindt, 2003a, 2003b, 2004; van den Hout, Kindt, Luigjes, & Marck, 2007; van den Hout, Dek, Giele, & Toffolo, 2012).

In summary, the motivational factors in compulsive checking and ERS are thought to be the same, i.e. exaggerated perception of threat and inflated sense of responsibility. But what about the other elements identified by Rachman? At this stage it is impossible to fully answer that question due to lack of empirical investigations. However, as pointed out by Parrish and Radomsky (2011) it is reasonable to suspect that some of the proposed mechanisms that maintain compulsive checking may not feature in excessive reassurance seeking. For example, studies show that compulsive checking and other perseverative behaviours (like staring), induce distrust not only for memory (which obsessional patients already doubt; see Coughle, Salkovskis, & Thorpe, 2008) but also about perception (van den Hout et al., 2008; van den Hout et al., 2007; van den Hout et al., 2012; van den Hout et al., 2009). Although it remains to be tested empirically, Parrish and Radomsky (2011) argue that it is unlikely that ERS has such an effect and give an example of a person who repeatedly asks someone to confirm that he or she turned off the stove. According to the authors, this should not provoke memory distrust for the physical act of turning off the stove. Although this may be true, it would also be interesting to examine whether the person's memory confidence for the *act of seeking* reassurance and *how* the 'reassurer' responded (as opposed to whether the person checked or not) is affected. This remains to be tested empirically. Furthermore, as stated before ERS is an interpersonal behaviour whereas compulsive checking is typically not (Rachman, 1976a, 2002). As argued earlier in this thesis (and empirically examined in the next chapter) and elsewhere (Parrish & Radomsky, 2011) various interpersonal elements of the provision of reassurance play a key role in the maintenance of ERS, for example, it is not uncommon for OCD sufferers to request their caregivers to provide reassurance in a very specific and 'correct' way for it to work, whereas interpersonal aspects are likely to be less relevant in the maintenance of compulsive checking.

Research Evidence

Although both Salkovskis and Rachman give convincing arguments for conceptualising excessive reassurance seeking as a form of compulsive checking, experimental analysis confirming this hypothesis is almost non-existent. This lack of experimental analysis may perhaps be related to

the difficulties in controlling the activation of reassurance seeking in experimental settings due to its interpersonal nature.

With regards to the existing research literature on ERS and anxiety problems, it has been shown that reassurance can reduce feelings of anxiety, but this relief tends to be short lived, only triggering further reassurance and so on. These findings have been reported in case studies of patients diagnosed with health anxiety (Salkovskis & Warwick, 1986) and more recently Abramowitz and Moore (2007) published findings where twenty-seven patients with health anxiety were exposed to threat related information about their health under two conditions: (i) subsequently performing SSBs; or (ii) given instructions not to perform SSBs. Findings demonstrated the functional link between the excessive preoccupation with illness and SSBs within the context of health anxiety, and suggested a role for SSBs as a maintenance factor for the disorder. It should be noted that ERS was only identified as one example of a SSB which the participants engaged in, as opposed to being exclusively manipulated. Nevertheless, the study offers some support for the conceptualisation of ERS as a form of SSB. Similarly, Olatunji et al. (2011) investigated the extent to which SSBs (including ERS) contribute to the development and exacerbation of health anxiety symptoms. Participants were randomly assigned into two groups: either a SSB condition where participants spent one week actively engaging in health-related SSBs (including reassurance seeking); or a control condition. Consistent with predictions, by actively engaging in health-related SSBs resulted in a significant increase in health anxiety and related beliefs in comparison with the control group. In other words, this suggests that SSBs function as an important maintenance factor in health anxiety.

Approaching the concept of reassurance from a slightly different angle, Meechan, Collins, Moss-Morris, and Petrie (2005) tried to answer the question why some women fail to be reassured following benign diagnoses of breast symptoms. The answer seems to lie in the presence of health anxiety; 33% of the women were not reassured about their breast symptoms despite a benign diagnosis. This proportion of the total sample had higher health anxiety compared to the other 66% who felt reassured post diagnoses.

Parrish and Radomsky have published some interesting studies exploring ERS within the context of OCD. What follows is a brief review of their findings but their studies are also referred to in the subsequent chapters. Their first study (Parrish & Radomsky, 2006) was an experimental investigation of responsibility and reassurance examining the relationships with compulsive checking by employing a similar protocol to the one developed by Ladouceur et al. (1995). In short, non-clinical participants were instructed to perform a complex pill sorting task under conditions of high or low responsibility where reassurance was either provided or not. As hypothesised, findings revealed that higher levels of perceived responsibility had a significant

impact upon participant's urges to check, urges to seek additional reassurance, and confidence in outcome in comparison with low responsibility conditions. This suggests that ERS and compulsive checking may function similarly and/or be driven by similar processes (although it should be noted that anxiety levels were unaffected). Against the authors' hypothesis, repeated reassurance did not have an effect on participant's anxiety levels, compulsive urges or confidence in outcome. However, as pointed out by themselves the reassurance provided in the study is unlikely to reflect the reassurance that takes place within the context of OCD (Parrish & Radomsky, 2006).

Using a series of experimental vignettes, the same authors examined how manipulations of threat, responsibility and ambiguity of feedback impacted upon healthy volunteers' anxiety and compulsive urges to seek reassurance and to check. As predicted, high levels (versus low levels) of perceived threat and high (vs. low) levels of perceived responsibility for preventing harm were associated with greater ratings of anxiety, urges to check and (in the case of threat only) urges to seek reassurance - offering further support for Rachman's (2002) model of compulsive checking. However, while manipulations of perceived threat affected levels of anxiety, urges to check and urges to seek reassurance, manipulations of responsibility did not have an effect on the participants' urges to seek reassurance. Again, this might result from the way reassurance was manipulated; but could equally suggest that the dispersion of responsibility is not necessarily a motivational factor in ERS (Parrish & Radomsky, 2011). Finally, higher levels of ambiguous feedback regarding threatening situations were associated with the maintenance of compulsive urges (checking and reassurance) and anxiety (Parrish & Radomsky, 2011).

In their most frequently cited study on ERS, Parrish and Radomsky (2010) interviewed OCD sufferers and depressed patients to examine various cognitive and behavioural factors involved in the onset, maintenance and termination of ERS and checking behaviour. In terms of ERS specifically, results indicated differences between groups in what they sought reassurance about; individuals suffering from OCD sought reassurance to reduce anxiety and to prevent general harm (e.g. fire and theft), whereas the depressed individuals reported seeking reassurance to prevent social harm or to increase self-esteem/elicit affection from others. With regards to checking, anxiety reduction and general harm prevention was endorsed as the principal function. The authors concluded that these results give further evidence for the hypothesised functional similarities between ERS and checking within the context of OCD, i.e. both behaviours are primarily intended to decrease feelings of anxiety and/or prevent harm (Parrish & Radomsky, 2010). However, findings also suggested some counter-theoretical findings as diminishing responsibility for harm was infrequently endorsed as a principal function of ERS or checking. One finding from this study (which rarely gets mentioned) is also of theoretical interest. The authors reported that the onset of both ERS and checking was associated with similarly high anxiety levels

and threat estimations both in the OCD and the depressed group - suggesting that exaggerated threat perception may not be specific to anxiety problems which would in some sense go against Beck's (1976; 1985) classic theory regarding the cognitive specificity in depression and anxiety (in anxiety, the theme is perceived physical or psychological threat, while in depression the focus is on loss or deprivation). The authors speculated whether this finding meant that the primary *type* of threat (social versus general) that triggers compulsive behaviour may differ between OCD and depressed individuals, as opposed to excluding threat perception in depression (Parrish & Radomsky, 2010). This opens up interesting theoretical discussions and thinking, for example, whether the perception of threat can be fitted under Beck's model for depression which traditionally focuses on themes of loss and unlovability as a primary theme. These theoretical speculations will be given more room in subsequent chapters.

Finally, using qualitative methods Kobori et al. (2012) interview ten OCD sufferers about their understanding and experiences of ERS. The interviewed focused on various aspects of ERS, including potential motivational factors, consequences of the behaviour and how people process reassurance. The results identified, harm prevention, intolerance of uncertainty and transference of responsibility as key motivational factors in line with the authors' hypothesis. Findings also suggested that OCD sufferers that seek reassurance excessively make particularly strong effort to understand the reassurance that is provided to them and they want the 'reassurer' to take their requests for reassurance seriously and think about their answers before giving them. They also appear to be very focused on various non-verbal aspects of the behaviour such as whether the person looks confident, whether the answers make sense or if there are any mistakes in them. This is all done while simultaneously they strive to 'repair' the negative impact their persistent asking has on their interpersonal relationship. Members of the same research team followed up the qualitative study with a questionnaire study (Kobori & Salkovskis, 2013) where OCD sufferers were found to seek reassurance more intensely and carefully relative to people suffering from panic disorder or healthy controls. In addition, excessive reassurance seeking was found to be more frequent in both clinical groups compared to healthy controls.

In summary, several converging lines of evidence provide support for the hypothesis that ERS can be conceptualised as a safety-seeking behaviour, in the form of a special type of interpersonally focussed checking behaviour. However, findings are somewhat inconsistent when it comes to offering support for the hypothesised role of responsibility. This inconsistency is likely to reflect the problems in triggering real urges to seek reassurance in experimental settings, similar to those experienced by sufferers of anxiety problems such as OCD. As stated before in this thesis, many questions are still unanswered about the function of ERS and mechanisms involved in this

complex compulsive behaviour. This gap in understanding requires a clearer conceptualisation of how ERS functions and empirical research to evaluate this.

This thesis seeks to fill the gap through five different studies on excessive reassurance seeking within the context of anxiety disorders, approaching ERS from four different angles. Namely, non-clinical sample's, sufferer's, therapist's and caregiver's perspective. By doing so the intention is to answer some of the outstanding questions about the function and treatment of excessive reassurance seeking.

The first study recruits caregivers of OCD patients and interviews them about their experiences and understanding of this complex behaviour. Although we know from previous studies (e.g., Calvocoressi et al., 1995; Shafran, Ralph, & Tallis, 1995; Storch et al., 2007) that caregivers are frequently asked to take part in various rituals as part of the OCD sufferer's problem we are still in the early stages of understanding the factors that elicit and maintain these responses in carers. No attempt has been made to examine in depth what motivates caregivers to give reassurance, how are they asked to provide reassurance, how often, what effect do they perceive it has on the OCD sufferer and so on. Finding some answers to these questions is critical given the importance reassurance seeking and its provision plays in maintaining the anxiety problem.

The last seven years have seen a growing interest in developing cognitive behavioural treatment interventions that are more acceptable for patients. Much has been written about the judicious use of safety behaviours (e.g., Rachman et al., 2008) although research findings supporting this view remain somewhat inconsistent. However, there is a clear need for making treatments more tolerable for people who suffer from anxiety problems, particularly those on the severe end. With regards to the treatment of excessive reassurance seeking, it seems that exposure response prevention principles still influence clinical practice (e.g., Abramowitz & Braddock, 2008; Furer, Walker, & Freeston, 2001; Rachman, 2002; Taylor, Asmundson, & Coons, 2005). The approach taken in this thesis is that a more subtle approach is needed particularly for those that suffer from severe anxiety problems. Thus, study 2 examines excessive reassurance seeking in two different clinical populations where ERS commonly forms part of the presenting problem, i.e. OCD and health anxiety. In addition it directly compares ERS with a non-pathological interpersonal behaviour, which people commonly engage in when they feel distressed, that is, support seeking. The aims of this study are to examine the potentially transdiagnostic and disorder specific factors of excessive reassurance seeking, and also to gather information about the differences in function of reassurance and support. The latter aim relates to the author's suggestion that a more acceptable treatment intervention for ERS involves helping patients to shift from seeking reassurance to seeking support as opposed to following exposure and response prevention rationale which are more centred around withholding reassurance.

Study 3 considers the perspectives taken by those responsible for helping patients make this shift, in that it examines therapists' perception and understanding of excessive reassurance seeking. More specifically what emotional problems they associate excessive reassurance seeking with, how they understand its function and importantly what CBT treatment interventions they consider important and not important when treating ERS. This study seeks to benchmark qualified clinicians working in routine clinical practice with varying degree of experience against international expert consensus drawn from leading clinical researchers.

Next, the issue of therapeutic intervention in severe and persistent reassurance seeking is illustrated in detail (study 4) using a single case experimental design with an older adult suffering from severe and treatment refractory contamination OCD.

The final study (study 5) seeks to bring together the findings from the previous studies and more broadly tackle the diagnosis specific and transdiagnostic issues by considering excessive reassurance seeking in clinical samples of people suffering from OCD, health anxiety, social phobia, panic disorder or generalized anxiety disorder, with a view to considering the extent to which excessive reassurance seeking is transdiagnostic as opposed to disorder specific. This study employs a newly developed questionnaire that taps into various components of excessive reassurance seeking, including motivational factors, consequences (e.g. emotional effect, interpersonal), frequency and more.

Chapter 3:

I Do Not Know What Else To Do: Caregivers' Perspective on Reassurance Seeking in OCD

Excessive reassurance seeking is particularly common in people experiencing OCD, where it typically causes problems both for the sufferer and for those who are close to him/her and are trying to alleviate the suffering. Reassurance typically takes the form of direct verbal questions, but equally reassurance can be sought (and provided) through other means such as non-verbal gestures (e.g. facial expressions) or even go entirely un-noticed or be completely hidden where the reassurance is given without the 'provider' being aware of it (e.g. an OCD patient sharing with a friend a story he pretended to have read in the paper about someone who had intrusive violent thoughts, intending to check the friend's reactions to the story especially if he/she believes that person is dangerous). If we imagine that reassurance seeking falls on a continuum, ranging from low intensity and infrequent questions to those, which are abnormally excessive and abnormally extensive, it seems logical to assume that the latter group suffers more. However, reassurance seeking of low intensity may be equally problematic in terms of maintaining pathological levels of perceived threat and also impact on relationships. Consequently, part of successful therapy must involve helping the person to shift from seeking reassurance to engaging in a more helpful interpersonal behaviour. The 'cost' of excessive reassurance seeking can take other forms as well; individuals experiencing distressing obsessions, with sexual or violent content may for example contact the police to check if there are any unsolved 'hit and runs' - with the intention to seek reassurance that they themselves did not commit a crime without remembering it. This has sometimes devastating consequences such as prosecution for wasting police time or worse; false confessions and convictions to crimes. Other examples of 'human cost' include the caring father who deliberately avoids being around his children and asks his partner persistently for proof that he did not sexually abuse them. His fears are so great that he no longer spends a moment alone in the company of his children and only feels safe, i.e. reassured when in the company of other people. A loving mother who worries about stabbing her children, asks her husband up to 100 times a day for reassurance that she is a caring mother and a good person.

From the preceding examples it is obvious that OCD often occurs in an interpersonal context. Under such circumstances clinical observation and research suggests that relationships commonly deteriorate, which is almost self-evident given the stress and strain OCD can put on family functioning and peoples' lives (Cicek, Cicek, Kayhan, Uguz, & Kaya, 2013). As evidence for the importance of interpersonal variables in OCD emerges, so has research linked to interpersonal factors and the application and development of carer-based treatment interventions (Renshaw, Caska, Rodrigues, & Blais, 2012). Here evidence is reviewed mainly from the caregivers'

perspective, focusing first on the quality of life, burden and associated factors in caregivers of patients with OCD, followed by a discussion about symptom accommodation and a brief review of the existing family- or caregiver based treatment interventions.

Burden, quality of life and associated factors in caregivers of patients with OCD

By and large, research examining the effects of caring for an individual presenting with any mental health problem demonstrates some negative impact on the carer in terms of distress, quality of life, disability, emotional burden, coping and other factors (Chadda, Singh, & Ganguly, 2007; Kalra, Kamath, Trivedi, & Janca, 2008; Zabala, Macdonald, & Treasure, 2009). Historically, the focus has been on caregivers of patients diagnosed with either dementia or psychosis, and much less is known about the situation with common mental health problems in general and OCD in particular.

The 'distress, burden and quality of life literature' overall shows inconsistent findings when these constructs are examined in mental health problems, perhaps due to the overlap between these (complex) constructs and poor definitions. Additionally, as pointed out by Renshaw, Chambless, Rodebaugh, and Steketee (2000) the evidence is mostly of correlational nature, so no definitive conclusions can be drawn. However, this area of investigation is still important, particularly within the context of OCD, not only due to the possible impact these factors may have on the individual suffering from OCD, but also because they might play a significant role when it comes to understanding carers reactions to symptoms of OCD. For example, within the context of reassurance seeking, it is self-evident that caregivers distress, experienced burden and beliefs about OCD, affect their decisions on how and if to respond to requests for reassurance.

In psychosis, the findings are inconsistent with some reporting more and others reporting similar or lower level of burden in the caregivers of schizophrenia patients compared to carers of individuals suffering from OCD (Jayakumar, Jagadheesan, & Verma, 2002; Kalra et al., 2008). With respect to depression, Vikas, Avasthi, and Sharan (2011) found that OCD was associated with a greater perceived burden on caregivers and they had to accommodate to a greater degree. Interestingly, when compared to caregivers of individuals with dementia (a condition which has very different clinical features compared to OCD), similar levels of interference is reported from OCD caregivers on various burden dimensions such as interference in their personal life, patient dependence and feelings of embarrassment and guilt (Torres, Hoff, Padovani, & Ramos-Cerqueira, 2012). The same authors reported that sharing a household with an individual suffering from OCD was significantly associated with negative feelings in the carer, such as irritation or intolerance. They correctly point out that such negative feelings may result from the caregivers' beliefs about OCD (illness perceptions); in particular whether they believe that the OCD patient has control over

his/her compulsions. For example, many OCD behaviours (e.g. constant checking) cause problems in daily family functioning or household routines and may seem bizarre or unnecessary to the caregiver who might think the OCD patient should 'just stop' his compulsions, 'lacks willpower' to do so, 'wants everything done their way' or his/her intention is to irritate other family members. Within this context, it is interesting to point at Renshaw et al. (2000) finding where relatives of patients with OCD made significantly more criticism of anxiety-related symptoms and interpersonal problems than did relatives of patients with panic disorder. No firm conclusions can be drawn from this single study regarding what drives this difference. However, it raises interesting questions whether caregivers might be less critical of anxiety problems that consist of symptoms they can relate to (e.g. most people have experienced panic like symptoms in their lives). Further support for caregivers' distress, disruptions in their personal lives and diminished quality of life and emotional involvement due to OCD patients' symptoms has been reported elsewhere (e.g., Black, Gaffney, Schlosser, & Gabel, 1998; Cicek et al., 2013; Cooper, 1996; Grover & Dutt, 2011; Stengler-Wenzke, Kroll, Matschinger, & Angermeyer, 2006).

In sum, caregivers of adults (and equally children) suffering from OCD, are typically affected by their condition in a negative way. The negative experiences include general psychological distress, diminished quality of life, problems with family functioning and burden (Grover & Dutt, 2011; Ramos-Cerqueira, Torres, Torresan, Negreiros, & Vitorino, 2008; Vikas et al., 2011). This impact seems to be on a par with or worse relative to caregivers of individuals with other mental health problems. It is difficult to draw any firm conclusions on what specifically accounts for this negative impact. Some researchers argue for genetic vulnerability in caregivers for symptoms of OCD as an explanation factor for the caregivers distress, whereas others point to symptom severity or more cognitive factors such as illness perceptions (Renshaw et al., 2012). However, as pointed out by Steketee and Van Noppen (2003) the causal directionality remains unclear. In other words, we do not know whether OCD worsens family functioning or whether poor family functioning exacerbates OCD symptoms – indeed the relationship might also be reciprocal. Leaving different opinions aside, what the current evidence highlights is application and development of caregiver-based interventions for OCD.

Symptom Accommodation

Accommodation is the term generally used to refer to all behaviours or actions that family members, caregivers, partners etc. engage in either to prevent or alleviate the patient's obsessive compulsive symptoms. In addition to reducing or preventing anxiety these behaviours or actions are typically intended to help caregivers to get through daily routines. Frequently found examples include: providing the patient with additional time (e.g. apologising for their lateness) or materials (e.g. buying certain cleaning products) needed for rituals, modifying personal routine to fit around

the patient's symptoms and decreasing their responsibility (e.g. making sure the patient is never responsible for locking the house), taking care of patient's obligations that are left unmet due to rituals and aid in avoiding obsessional stimuli and so on (Abramowitz, Baucom, Wheaton, et al., 2013; Calvocoressi et al., 1999; Shafran et al., 1995; Van Noppen, Steketee, McCorkle, & Pato, 1997). Although accommodation is appropriately considered by some clinicians to be critical to the maintenance and recovery of OCD, we are still in the early stages of understanding the factors that elicit and maintain such maladaptive caregiver responses to OCD. Accommodation can best be conceptualized from a cognitive and behavioural perspective as the outcome of safety-seeking behaviour (Salkovskis, 1991). When accommodation is provided it prevents the sufferer from acquiring new information that disconfirms his or hers inaccurate threat beliefs because when the feared outcome (e.g. house fire) does not happen, the 'lucky escape' is explained by the (successful) use of the safety-seeking behaviour (e.g. the carer was asked to 'double check' that the cooker was not turned on) instead of resulting in decreased perception of threat. Additionally it can increase preoccupation with threat and reinforce inaccurate beliefs about the importance and helpfulness of involving other people to prevent (or diminish the odds of) danger from happening (Salkovskis, 1991). For example, consider a husband with contamination fears who avoids any dark spots because they might be HIV contaminated blood. To prevent getting sick, he avoids touching any door handles when outside the house. By accommodating her husband's avoidance, for example, by opening doors for him and making sure he does not need to touch any door handles or dodgy spots, the wife prevents her husband from learning that his fears of becoming HIV infected will not materialize.

One of the earliest studies (Shafran et al., 1995) to examine accommodation in OCD, recruited 98 family members and revealed that 60% of the sample was involved in conducting or observing rituals (including the provision of reassurance) or participating in avoidance behaviour at the OCD sufferer's request. Only 2% (1 person) of those who accommodated reported not complying with the patient's demands. Similarly, Calvocoressi et al. (1995) surveyed 34 family members of patients experiencing OCD where approximately 90% of the participants accommodated, ranging from mild to extreme; one-third of the participants reported frequently (three or more times per week) to give reassurance. The same number of participants reported taking part in other rituals and/or taking over activities that were the OCD sufferer's responsibility but the patient felt incapable of doing. Unsurprisingly, the participants in these two studies reported interference in their lives and feeling distressed as a result of their involvement. More recent studies have also found high prevalence rates for family accommodation; rates as high as 90% (Ramos-Cerqueira et al., 2008) and 96.9% in adult samples (Stewart et al., 2008) and 88% in paediatric samples (Merlo, Lehmkuhl, Geffken, & Storch, 2009). For current purposes, it is important to point out that

reassurance seeking tends to be one of the most common manifestation of accommodation across adult and paediatric samples (Peris et al., 2008; Stewart et al., 2008; Storch et al., 2007).

Caregivers are usually trying to help or make the sufferer feel better in any way possible. Clinical observation suggests that avoidance also plays a significant role, i.e. avoidance of potential conflicts, criticism, anger or even physical aggression on behalf of the sufferer. In addition, accommodation can help to lower the caregiver's own levels of distress. There might also be simple practical reasons for accommodating, such as time saving; for example, when a caregiver is confronted with a situation where simply providing reassurance (or accommodating) makes it possible for both the carer and the sufferer to leave the house and also prevents the sufferer from spending hours agonizing and compulsively checking the cooker, it is understandable how hard it is to withhold reassurance and other accommodating behaviours. Consistent with the clinical observations mentioned above, Calvocoressi et al. (1999) reported findings where 57% of relatives of those with OCD reported accommodating specifically to diminish patients' anger or distress, and 76% reported that they accommodated to decrease the time spent by the sufferer on compulsive activities. Recent studies in paediatric OCD have yielded similar findings and there is also evidence that within that context accommodation may be imposed through physical aggression or emotional blackmail from the child (e.g. "you don't want to help me because you hate me") (Lebowitz, Omer, & Leckman, 2011; Lebowitz, Vitulano, & Omer, 2011).

Involving Caregivers in Treatment

Although caregivers' involvement in OCD is intended to reduce strain, particularly in the short-term, clinical experience suggests that relationship or family dysfunction is inevitable with a sense of insecurity, a feeling of stuckness and frustration in those involved; as well as carer's ambivalence and alternation between helping the sufferer with their symptoms and directly opposing them. This vicious cycle perpetuates the OCD unless interrupted by efforts to change family interactions in relations to symptoms. Considering the impact on caregivers, research indicates that accommodation is related to higher levels of overall psychological and familial distress. For example, Albert et al. (2010) reported findings where higher accommodation was related to greater distress in relatives of adults with OCD. Similarly, Amir, Freshman, and Foa (2000) found that higher levels of accommodation were related to higher feelings of depression and anxiety in relatives of children and adults with OCD. In addition, higher accommodation has been associated with poorer relationship functioning and treatment response (Boeding et al., 2013), greater OCD symptom severity (Stewart et al., 2008) and refractoriness of OCD (Ferrão et al., 2006). Furthermore, Storch et al. (2010) demonstrated in a sample of adolescents with OCD that accommodation was associated with greater functional impairment, above and beyond the effects of symptom severity.

Whether caregiver accommodation is a precursor or consequence of OCD severity remains to be answered, but the interplay is certainly complex and most likely bi-directionally influenced (Renshaw et al., 2012). Leaving directionality aside, the current evidence highlights the importance of taking caregiver functioning into account when treating individuals with OCD and clearly suggests a role for caregiver oriented interventions. In fact, Amir et al. (2000) reported that caregivers' accommodation resulted in worse treatment response to behavioural therapy. Although children are embedded in a family context in a way that is meaningfully different from that of adults, findings suggest a similar effect in them; higher levels of family accommodation at baseline predicts poorer treatment outcome (Garcia et al., 2010). Correspondingly, studies examining the effects of reducing family accommodation to OCD symptoms have found positive effects. For example, Grunes, Neziroglu, and McKay (2001) examined the effects of family involvement in behavioural treatment for children and adults who suffered from OCD. They provided relatives 8-week psychoeducational group intervention designed to help reduce accommodation to OCD symptoms. Results indicated that patients whose family member was involved in the group had a greater reduction in OCD symptoms and depressed mood than those patients whose family member was not involved. In addition, depression and anxiety was reduced in the relatives who participated in the psychoeducational group. In childhood OCD, Merlo et al. (2009) found that changes in parental accommodation predicted treatment response to cognitive behavioural therapy and Peris and Piacentini (2012) noted that reduction in accommodation may precede improvement in both symptom severity and OCD related functional impairment. These findings have been replicated in samples of young children, aged 4 to 8 years, diagnosed with OCD (Freeman et al., 2008; Lewin et al., 2014).

Summary

Mounting evidence supports the notion that OCD is associated with a variety of interpersonal problems both in adult and paediatric populations and, in turn, the interpersonal environment of individuals with OCD is an important factor for the progression and recovery of the disorder. Caregivers' accommodating behaviours appear to reduce the effectiveness of evidence based psychological treatments, such as CBT, for OCD. But the caregivers also suffer themselves; evident in elevated levels of relationship and psychological distress and impaired quality of life. This obviously calls for caregivers' involvement in treatments for OCD and interventions targeting the interpersonal aspects of the disorder. In fact, increasingly guidelines and manuals for treating OCD, in particular for children (e.g., Bolton et al., 2011), advocate for involving families. However, with few exceptions (e.g., Abramowitz, Baucom, Wheaton, et al., 2013; Lewin et al., 2014; Renshaw, Steketee, & Chambless, 2005), these family-based interventions tend to include a minor focus on the role of the caregiver in maintaining the problem and/or producing behaviour change.

Instead they are mostly based on either providing caregivers with psychoeducation about OCD and the process of exposure response prevention or incorporating them as coaches in exposure assignments (Mehta, 1990; Renshaw et al., 2012; Renshaw et al., 2005; Steketee & Van Noppen, 2003).

Study Aims

The main aim of the present investigation is to help to fill the gap in understanding reactions of family members by specifically gathering information about caregivers' experiences and understanding of reassurance seeking within the context of OCD. Specifically, the aims are to gain more in-depth understanding of why family members (and others) constantly give reassurance; what reasons influence their decisions to give or withhold reassurance; what are the effects of giving/withholding reassurance; and what are the interpersonal effects of persistent reassurance seeking.

This study is primarily phenomenological as no research has directly looked into carers' experiences of excessive reassurance seeking. Thus little is presently known about the possible factors involved in the provision of reassurance. However it is predicted that:

- i. Carers are motivated to provide reassurance primarily to reduce distress in their loved one but other reasons are also expected such as wanting to avoid confrontations
- ii. Those providing reassurance to people suffering from OCD will report that the impact of reassurance on their loved one includes possible short-term reductions in distress but adverse longer-term consequences
- iii. It is predicted that carers will report a negative impact on themselves relating to the provision of reassurance, such as negative emotions, even though they understand why their loved one is seeking reassurance

Method

Design

The protocol of the current study was approved by a NHS Research Committee (Ref. 07/Q0706/39). Participants, who consisted of caregivers of OCD patients, completed a semi-structured interview that was specifically developed for this study and aimed at gathering information about participant's understanding and experiences of reassurance seeking within the context of OCD. Theoretical thematic analysis (Braun & Clarke, 2006) was performed on the interview transcripts and relevant themes identified.

Participants

A sample of 10 volunteers contributed to the study. Participants were recruited via specialist OCD treatment unit (n= 5) where the person suffering from OCD was having treatment, or through OCD charities in the United Kingdom (n=5). Participants were required to identify themselves as a partner or a family member, acting as a main carer for an adult OCD sufferer whom frequently sought reassurance from them. Participants were included in the study on the basis of their partner's clinical diagnosis of OCD and on their descriptions (and investigators observations) of the severity and negative interpersonal impact caused by the OCD sufferer's persistent reassurance seeking. Fourteen participants completed the screening process. Two participants were excluded based on their partner's diagnosis of comorbid autism spectrum disorder and two participants dropped out.

Materials

A semi-structured interview schedule was specifically developed for this study. The structure of the interview involves five sections and can be found in Appendix A. What follows is a brief summary of each section. In section one, the interview started with an open question, 'what in your experience is reassurance?' followed by questions exploring the intentionality of the behaviour, 'why do you think [the OCD sufferer] seeks reassurance?'. In the second section, the caregivers were asked what they felt triggered an urge to seek reassurance, how they were asked to provide it and how often, followed by a range of questions enquiring about their reactions to requests for reassurance. This part of the interview schedule was deliberately tailored at identifying a range of examples of reassurance seeking, including verbal, non-verbal and subtle aspects of the behaviour. The third section was aimed at exploring the process of giving reassurance or more precisely whether the caregiver noticed any specific attention (on behalf of the sufferer) being paid to how they provided reassurance and the effects of it. As an example, they were asked: 'how closely are you listened by the [OCD sufferer]?'; 'does he/she try to see your face to catch every nuance?'; 'how does the person look and feel when you give reassurance?'. The fourth section was aimed at exploring the effects and consequences of giving or withholding reassurance. For example: 'how do you think the person feels when you give reassurance? Does his or hers anxiety decrease immediately? If so, how long do you think the person feels better?'; 'If you did not give reassurance, what would the person do, how would the person feel?'. This section also enquired about the consequences of putting little effort into providing reassurance: 'If you did not think seriously or looked casual, what would the person do, how would the person feel?'. The final section aimed at unpacking what impact repeated reassurance seeking has on the caregiver and his or her relationship with the OCD sufferer. This section included questions such as: 'do you get angry, upset or disappointed after you are

repeatedly asked for reassurance?’. Finally, before concluding the interview, participants were asked to reflect on what motivated them to give reassurance, whether they viewed it as a temporary solution and enquired if they had any ideas or experiences about how to cope without giving reassurance.

Procedure

The semi-structured interview schedule was developed with input from clinicians with expertise in treating anxiety disorders, including OCD. A preliminary version of the interview was piloted with one OCD carer, who had experience of ERS, and volunteered to help. Their feedback was discussed amongst the research team and used to revise some interview questions as appropriate. Individuals that had expressed interest in participating in the study were contacted by telephone and given further information about the research. In addition, they were asked to describe their relationship with the OCD sufferer and talk little bit about their experiences of reassurance seeking. If all relevant inclusion criteria were fulfilled (and if the individual was still keen to participate) a time for the interview was booked and all relevant forms (e.g. consent forms, information sheets) were posted to the participants.

All interviews started with a brief summary, reminding participants of the study aims: to discuss their experiences and understanding of reassurance seeking within the context of OCD. Following that they were given the opportunity to ask questions regarding any aspects of the study. The interviewer had no contact with the OCD sufferers and they were not present at the interview. In terms of the interview structure, the interviewer encouraged participants to elaborate on their answers, avoid simple ‘yes’ and ‘no’ answers and instead try to give as much information as possible (Interviewer: “please elaborate on your answers”). The interviewer was also allowed to prompt participants if he considered the answer not to be complete and participants were encouraged to seek clarification if they felt unsure about particular questions. On average the duration of the interviews was approximately 30 minutes. Each interview was recorded using a digital recording device and then transcribed verbatim by an independent transcriber. Each participant received a £10 pound voucher as a token of thanks for their participation.

Data Analytic Strategy

The current data set comprised 10 transcribed interviews, which were analysed in accordance with the established guidelines of thematic analysis, which offers an accessible and theoretically flexible approach to analysing qualitative data (Braun & Clarke, 2006). The analysis was conducted by the interviewer (BH), who is a clinical psychologist and an accredited cognitive behaviour therapist and experienced in treating emotional problems including OCD. It was believed that this

experience was important when it came to understanding participants responses to the interview questions and would also increase consistency of how the data was interpreted.

Thematic analysis as described by Braun and Clarke (2006) involves various steps aimed at extracting themes from the data. The exact procedures taken in the present study are described in detail and chronological order below:

- i. *Familiarizing with the data* - To start with, the researcher immersed himself in the data. This involved reading and re-reading all transcripts several times to gain familiarity and understanding of what was included in the data. Notes and initial ideas of what was thought to be interesting and significant in terms of what the participants were saying were written down.
- ii. *Generating codes and collating the data* – The interview transcripts were re-read again and interesting features were coded in a systematic fashion across the entire data set. Coded data were then collated and grouped together in meaningful clusters into separate tables.
- iii. *Extracting themes from the coded data* – Aided by the tables, the coded data and their interrelationships were carefully considered to generate overarching themes composed of subthemes. Visual representation in the form of a thematic map was drafted and used to explore possible links between themes and codes. Themes were determined by the relevance to theory development, prevalence (in more than 50% of the sample), and the perceived importance (based on their potential theoretical and clinical implications) of the data.
- iv. *Reviewing and refining the extracted themes* – Once the themes were identified they were further refined and reviewed. These involved two steps: firstly, making sure, by reading all the collated extracts for each theme, that the themes adequately captured the contours of the coded data. Secondly, repeating this process but now in relation to the entire data set. The main aim at this stage was to develop a coherent thematic map that explained the inter-relationships between different overarching themes and sub-themes. Following best practice guidelines for qualitative analysis (Elliott, Fischer, & Rennie, 1999), the main researcher (BH), who was highly familiar with the interview transcripts, sought consultation from the research team to ensure clarity and consistency in themes elicited. The team consisted of expert clinicians who have all published extensively within the field of cognitive theory and therapy. Differences in opinions were resolved via discussion. The transcripts were then re-read against the themes to ensure reliability.

- v. *Defining and naming themes* – This step involved further defining and refining the essence of each overarching theme and its subtheme; the thematic map was completed. In the process of preparing the final report, the main researcher (BH) focused not only on studying the overarching themes and sub-themes that emerged, but also on examining reassurance seeking as a process consisting of different components. As before, the research team was consulted and any differences in opinions were resolved via discussion.

Validation methods

Thematic analysis (as well as other qualitative analysis) poses risk to validity given the reliance on the researcher's interpretation of the data. To deal with these risks several steps are recommended in the literature (e.g., Braun & Clarke, 2006). They include regular supervision to provide an ongoing critique of the work and confirm adequate inter-rated reliability of the identified themes. In addition to adhering to these guidelines further steps were taken for this research in order to diminish the odds of any unwarranted interpretations. A clinical psychologist, specialised in treating OCD, was provided with 30% of the raw data (of random choosing) and asked to read the transcripts thoroughly and make notes of potential themes. Following that, the clinical psychologist was provided with the results showing the extracted themes (including the thematic map) and other relevant materials and asked to pay attention to the appropriateness of how the data was coded and the interpretations made. The clinical psychologist suggested changes to two overarching themes which were further discussed until an agreement was reached.

Results

Demographic Information

The participants consisted of nine women and one man. The average age was 44.33 years (SD = 17.85). Seven individuals reported being the sufferer's partner, two mothers for their offspring and one daughter cared for her mother. At the time of interviewing 9 out of 10 participants shared their home with the OCD sufferer and the duration of the caring role ranged from 8 to 30 years.

Overview of Thematic Analysis

Six overarching themes, eighteen subthemes and one superordinate theme emerged from the thematic analysis of the interview transcripts. Participants were asked to discuss from carers perspective and within the context of OCD their understanding of reassurance seeking; their experience of reassurance seeking; their typical reaction to requests for reassurance; the felt

interpersonal effect of this behaviour; and reflect on the relationship between giving reassurance and decrease in anxiety levels; their motivations for giving reassurance; and what they thought motivated the OCD sufferer to seek reassurance from them. One superordinate theme “frustration” was identified across most overarching themes, reflecting this negative and complicated feeling that seems to be triggered in both the person seeking reassurance as well as the person providing it as a result of reassurance seeking and provision. All themes are shown in Table 1.

Table 1. Themes derived from the qualitative analysis

Overarching theme:	REASSURANCE UNDERSTOOD AS A REACTION TO THE PERCEPTION OF THREAT
Subthemes:	<ul style="list-style-type: none"> - <i>Saying things will be ‘ok’, clarifying or confirming</i> - <i>It is an attempt to feel better</i> - <i>Triggers</i> - <i>Reassurance is helpful but not when you have got OCD</i> - <i>Giving reassurance without knowing it</i> - <i>Not involving another person</i>
Overarching theme:	THE INEVITABILITY OF OFFERING REASSURANCE
Subthemes:	<ul style="list-style-type: none"> - <i>I have to do it a lot</i> - <i>I always end up giving it</i> - <i>I know I should not be giving it but at the same time I know it helps</i>
Overarching theme:	CARER’S JUSTIFICATIONS FOR GIVING REASSURANCE
Subthemes:	<ul style="list-style-type: none"> - <i>It makes me and them feel better</i> - <i>It shows that I care</i> - <i>It is not their fault</i>
Overarching theme:	CARER’S RELUCTANCE TO WITHHOLD REASSURANCE
Subthemes:	<ul style="list-style-type: none"> - <i>Negative emotional response</i> - <i>Negative behavioural response</i> - <i>Not knowing what else to do</i>
Overarching theme:	CARER’S PERCEIVED IMPORTANCE OF CORRECT RESPONSE
Subthemes:	<ul style="list-style-type: none"> - <i>Needing to do it correctly</i> - <i>Not taking it seriously means that I do not care or that I need to do more of it</i>
Overarching theme:	CARER’S PERCEIVED INTERPERSONAL COST
Subthemes:	<ul style="list-style-type: none"> - <i>It makes me feel bad</i>
Superordinate theme:	FRUSTRATION

Note: Overarching themes and the superordinate theme are shown in bold and capital letters; subthemes are in italic

Thematic Map of Carer's Understanding and Experience of Excessive Reassurance

Seeking

In Figure 3, the thematic map of carer's understanding and experience of excessive reassurance seeking is depicted. This is presented here to give the reader an overall impression of the main results before reading in detail about each theme. The overarching themes are represented in grey coloured boxes. Lines link each subtheme to its overarching theme. The superordinate theme 'Frustration' is shown in grey capital letters and the way it is represented is meant to reflect the fact that this complicated feeling cut across most overarching themes. Following the thematic map, each theme is described in detail.

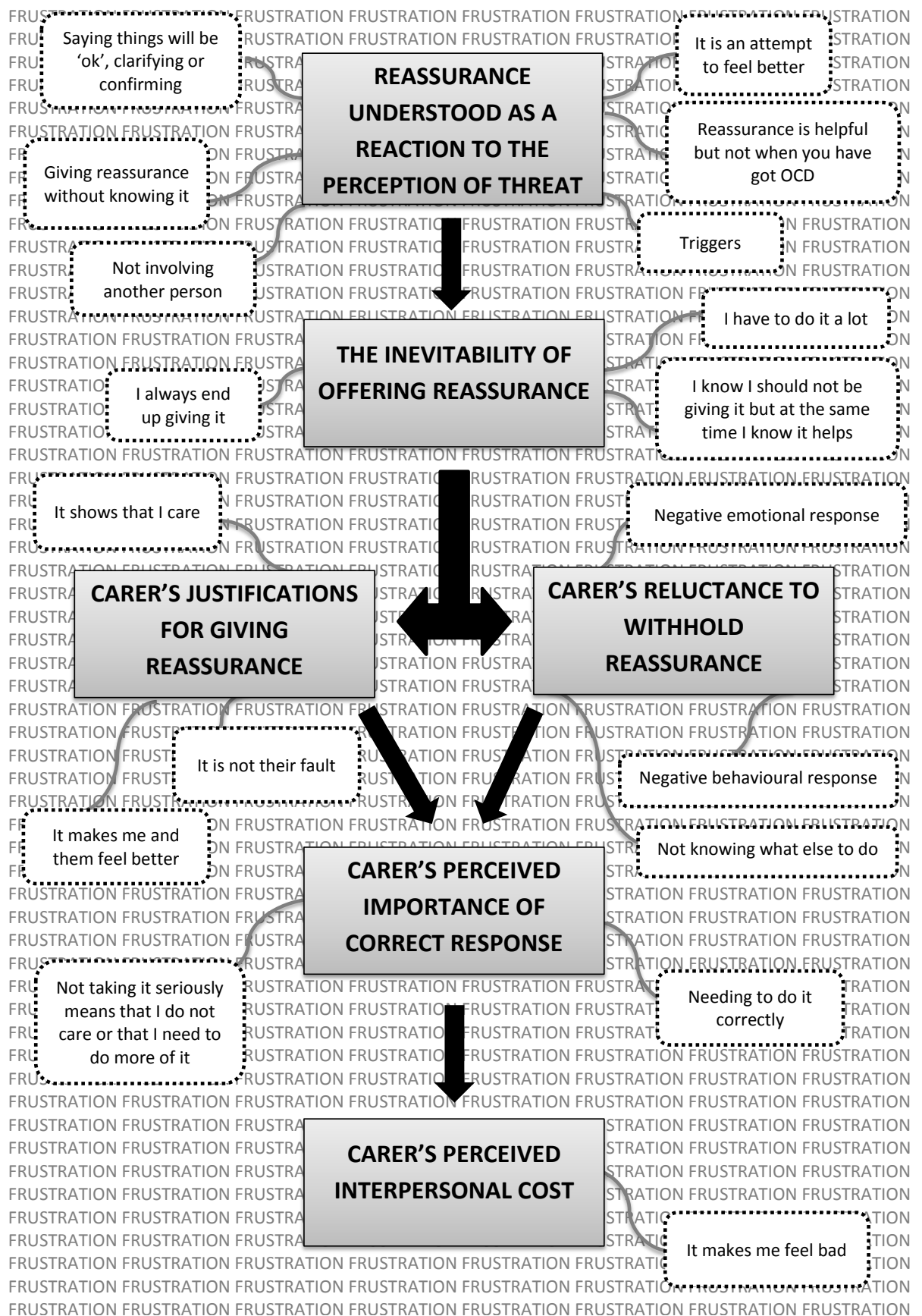


Figure 3. Thematic map of excessive reassurance seeking from caregiver's perspective

Overarching Themes, Superordinate Theme and Subthemes

REASSURANCE UNDERSTOOD AS A REACTION TO THE PERCEPTION OF THREAT

This overarching theme represents caregivers' experience and views of reassurance seeking. It taps into the different aspects of the behaviour, such as what forms ERS can take (direct or indirect), and what seems to drive and trigger reassurance seeking from the caregivers' perspective. Overall this theme is meant to reflect the phenomenology of the behaviour. Caregivers felt that reassurance is sought about perceived threats of harm resulting from doubts or making mistakes (e.g., "did I turn everything off?"), contamination related worries (e.g., "is this safe to eat?") and/or causing harm (e.g., "am I dangerous?"). Carers reported that requests for reassurance typically involved direct verbal questions (e.g. "did you see me check?") or non-verbal interactions such as 'happy-looking' facial expressions. In all instances the carer was meant to communicate the reassurance by saying (sometimes repeatedly) or signalling that things were/will be 'ok'; and/or clarifying or (dis) confirming threat related topics.

Overall participants felt that reassurance was employed by the OCD sufferer to reduce negative feelings, in particular anxiety. Most participants (eight out of ten) felt that reassurance was unhelpful and had a negative impact on the long-term course of OCD. Interestingly, three participants specifically reported that reassurance seeking was a helpful interaction to deal with distress or feelings of anxiety in 'normal people', but not for people with OCD where it appeared to them to function differently, become unhelpful and maintain the anxiety problem. Finally, the analysis supports previous research that reassurance seeking can take different forms, such as not including other people directly, i.e. self-reassurance, or is sought in hidden ways where people are tricked into giving reassurance.

Saying things will be 'ok', clarifying or confirming

Early on in the interview participants were asked to explain what they felt reassurance seeking was, i.e. how they defined and understood it. Overall, participants described reassurance as a verbal or non-verbal interaction that coincided with heightened feelings of anxiety. Some participants understood reassurance as a way of telling the OCD sufferer that 'things are going to be ok':

Participant 4: *"Reassurance is where I constantly say to him that everything's going to be ok..."*

Participant 3: *"... it's reassurance that she, that things are OK, that you know, not to think about things too much, just kind of explain that things are OK really."*

Other participants defined reassurance as giving clarification or confirming the accuracy or completion of certain tasks:

Participant 7: *"I would say it's giving somebody clarification on something they're concerned about. It's kind of affirming what they think so, if somebody asked you if they did something, then saying: "Yes you did do that; that did happen" and making them feel better.*

Participant 5: *"Generally it's about asking if things are off, like the oven. So I might be asked "Is this switched off?" or "I'm worried that this isn't straight, that the, that the switch isn't straight when it's meant to be so maybe it's still on..." and would I check in order to reassure her that it is off... that sort of thing."*

Other participants mentioned that in their experience reassurance seeking involved responding to the meaning of obsessive thoughts ("no I don't think that because you had this thought you are in any risk of stabbing our children"); or offering information about feared contaminants ("yes...your hands are clean").

It is an attempt to feel better

The perceived motivation for seeking reassurance is clearly an important issue, in terms of explaining why and how people respond to requests for reassurance. When asked to reflect on the sufferer's motivation/s for seeking reassurance, all participants reported that reassurance seeking coincided with high levels of anxiety or worry. In their mind the primary motivation for seeking reassurance was to counteract those negative feelings, in particular anxiety, by reducing the perceived danger or threat. For example, **Participant 5** reported when she was asked why she thought her partner sought reassurance:

"To reduce her anxiety around whatever it is that she's worried about."

Similarly, **Participant 9** said:

"Because he's worried and distressed, and he needs to, something that I say will provide reassurance and that will lessen the anxiety."

Two participants specifically mentioned other motivational factors such as 'the dispersion of responsibility' or 'intolerance or uncertainty' as a potential motivation for seeking reassurance. As an example **Participant 6** commented:

"... it shares the responsibility. So for example, you know, the checking won't, the physical checking she would like me, she doesn't always ask me, but she would like me, really I think, to go around the house and check the things she wants to check. Because once again the responsibility is shared, you know, if we come out the house and we find that the lights had been left on, well I checked as well so it can't just be her fault."

Triggers

As expected, all ten participants were frequently requested, by the OCD sufferer, to give reassurance. They reported that reassurance was usually sought from them (triggered) after the sufferer had experienced intrusive and unpleasant involuntary thoughts (e.g. harm coming to

someone), doubts (e.g., “are you sure I locked the door?”) and/or anxious mood or a mixture of all three. This was evident in all interviews. When asked what they felt triggered reassurance seeking in their loved one, the following participants said:

Participant 5: *“Anxiety, particularly for example if we are going to go on holiday or leave the house or if it’s something that my partner really wants to know is definite then she might ask me to check or provide reassurance that an appliance is off before we leave, anything like that.”*

Participant 4: *“It’s normally when he’s very anxious and he’s worrying about something and the OCD has kicked in, the thoughts are really bad and then he’ll ask me, at his worst, he’ll ask me a lot of times a day.”*

Participant 2: *“Yeah it’s the thoughts that she needs reassurance with, when she has these terrible thoughts that are offensive.”*

Participant 1: *“If my boyfriend is doubting something or if he has a thought that he can’t get rid of, he’ll ask me for reassurance.”*

Reassurance is helpful but not when you have got OCD

Participants were asked to reflect on their views of reassurance seeking; more specifically whether they felt reassurance within the context of OCD was ‘good’ or ‘bad’. Eight participants out of ten reported that reassurance was unhelpful and had a negative impact on the long-term course of OCD as an anxiety problem. This is particularly interesting given that the same participants reported elsewhere (and consistently) during the interview that their typical reaction to a request for reassurance was to provide the reassurance:

Participant 2: *“In the long run I know it’s bad because it simply feeds the OCD and it makes it worse”.*

Participant 5: *“Generally I think it’s bad because it tends to just continue the cycle, and provides reassurance for a very short period of time. I think with the nature of OCD it doesn’t really stick because that’s the whole point of it.”*

What stood out was that three participants specifically reported during the interview that reassurance seeking was generally helpful in terms of dealing with negative feelings, but not if people had OCD, where it appeared to them to become counterproductive. This was for example highlighted by **Participant 6** who commented:

“Well, in general I suppose it’s seen as a positive thing, you know, to reassure someone sounds like a nurturing caring word. So I think it’s probably seen in general as a positive thing. In my experience, from reassuring my mum from an OCD point of view, in the short-term it’s kind of, I think it lowers her anxiety to an extent, but in the long-term I don’t think it is helpful, just because it doesn’t sort of solve anything, it just provokes more questions and more reassurance-seeking behaviour really.”

Giving reassurance without knowing it

Reassurance seeking can be very subtle, in some cases even hidden, where reassurance appears to be somehow communicated without the provider’s knowledge. Participants were asked about their experiences of subtle reassurance seeking or if they had experienced being tricked into

giving reassurance. Of the ten participants, six had experienced this to some degree. **Participant 7**, for example, said:

“...I guess the one thing he does do is creep off to bed without telling me, so I’ll have to lock up and turn the lights out kind of thing, so I guess that’s him being a bit tricky in a way then because he knows it’s a way of for him, I would class that as reassurance in itself, that I’m doing it rather than him. So not just verbal reassurance, but he’s confident in me doing it but he’s not confident in him doing it, so it’s a kind of form of reassurance in that I’m doing it for him.”

Another participant mentioned how her daughter would sometimes not ask verbally for reassurance but found certain facial expressions reassuring, for example, when eating foods that she feared might be contaminated:

Participant 2: *“... casting glances is one...”* **Interviewer:** *“So she would look at you in a specific way?”* **Participant 2:** *“Yeah, if she’s eating all she has to do is look at me and then I kind of nod and then she’ll take another bite and then she’ll look again.”*

Not involving another person

Eight participants out of ten reported having noticed the OCD sufferer trying to reassure himself/herself when feeling anxious. In most cases the examples given involved the OCD sufferer mentally reviewing checks or talking out loud while engaging in checking rituals, or looking for information on the Internet. As expected ‘self-reassurance’ excludes any direct interpersonal contact, authority or reaction from other people:

Participant 7: *“...part of his checking and rituals are telling himself he’s done something. I’ll over-hear him and he’ll be looking at a lamp that’s off going “That’s off, I’ve turned the lamp off, that’s off” so he’s telling himself that as if... if he verbally says it out loud it means it’s true.”*

THE INEVITABILITY OF OFFERING REASSURANCE

This overarching theme describes how frequently (and persistently) carers are requested to give reassurance and how they typically respond when confronted with such a request. All participants reported that their typical reaction was to provide reassurance – in fact, they reported finding it inevitable. This is particularly interesting because most carers also described strong negative beliefs about giving reassurance to someone who suffers from OCD. At best it was a ‘temporary fix’. Furthermore, the analysis suggests that carers are typically asked to provide reassurance repeatedly; once is not enough. Sadly, some relationships appear to be completely consumed by reassurance.

I have to do it a lot

Participants were asked how frequently reassurance was sought from them. Eight out of ten participants said that they could not put a number on it; they simply felt that they were repeatedly asked for reassurance:

Participant 6: *"...on a bad day it would be almost, you know, one after the other after the other. And I kind of lose count."*

Participant 8 and **Participant 2**, both described examples of how this behaviour can become so excessive that it completely dominates people's lives:

Participant 8: *"... to me it feels constant. He'll say, 'That's dodgy isn't it?' and I'll say, and I will try and say no it's not, he's got better in that respect, but I'm still having to reassure him all the time. I'm not always agreeing that it's there, but I'm saying no it's not there, and he has to try and say back to me that it's just my mind telling me it's there."*

Participant 2: *"Practically constantly, I mean all the time with eating and drinking, all the time. Everything and going into the shower and getting dressed."*

I always end up giving it

When asked about their typical response to requests for reassurance, all participants reported giving reassurance when asked to do so although there was some variability in terms of how quickly they gave into the requests. Six participants out of ten reported that they tried to avoid giving it by providing something different such as reminding the OCD sufferer that reassurance seeking fuelled their OCD and should thus not be sought and/or given. In other instances carers appeared to be trying to de-flect or de-focus the attention away from the perceived threat. Although done with best intentions, these attempts usually did not have the desired effect, i.e. the carer ended up giving reassurance:

Participant 2: *"Well as I've said, yeah, I tend to give it. I will try and explain again and again, and I keep on explaining the same things that really that we know that it's best that I've heard that it's best just to let the thought stay there and try to ignore it and not react on it and I'll try and be reasonable and I've thought of similes, like 'oh you know how trees are blown down in a storm but reeds just bend in the wind, and when the storm comes you've got to be a reed' and I'll try and go through all that sort of stuff. And obviously I'm giving reassurance in the end, and she says 'It's not my fault' well no, of course it's not your fault."*

I know I should not be giving it but at the same time I know it helps

As mentioned above, eight participants out of ten felt that reassurance was unhelpful and potentially damaging for the long-term development of OCD. However, the same participants still felt incapable of withholding reassurance. **Participant 2** summarized this predicament when she said:

"In the long run I know it's bad because it simply feeds the OCD and it makes it worse, I know that, but in the short-term when she's distressed or stressed and when it's a matter of getting her, in her case, to eat or drink or wash or whatever then it seems a reasonable thing to do."

Similarly, **participant 7** said:

"I would say that it has an immediate kind of good effect on the person with the OCD, it's good for them because it makes them stop worrying or at least lessens the worry but I find it frustrating because it's I guess unnecessary in that we both know the answer is "Yes the door is locked" for example."

Later in the interview participants were specifically asked if they thought reassurance only worked temporarily. Nine participants felt that way (keeping in mind that they all typically gave reassurance), i.e. in their experience the doubts or fears driving the OCD swiftly returned after reassurance was provided and the decrease in negative feelings was temporary at best:

Participant 4: *"It's good for a very small amount of time, ten minutes, and then after that he will ask me again so the reassurance only lasts for a very short time."*

CARER'S JUSTIFICATIONS FOR GIVING REASSURANCE

This overarching theme represents the caregiver's motivation/s for providing reassurance. In other words, what reasons direct their decision/s to give (as opposed to withhold) reassurance. Three key factors were identified. Firstly, participants described how giving reassurance sometimes had a twofold effect, where on one hand it helped to make the sufferer feel less anxious and on the other hand gave themselves the chance to focus on something different and/or continue with what they wanted to do (as opposed to withholding reassurance and causing more persistent reassurance seeking) . Another important motivational factor that was identified had to do with showing care and/or love for the sufferer where giving reassurance appeared to communicate those feelings. Finally, some carers talked about reassurance seeking being part of OCD, meaning it was not under the control of the sufferer. Thus, they should provide reassurance when request to do so.

It makes me and them feel better

Six participants out of ten said that they gave reassurance to make the sufferer feel better by alleviating negative feelings, such as anxiety or stress. This was for example highlighted by

Participant 7 and Participant 5:

Participant 7: *"To make him feel better. It seems like an automatic response, someone asks you a question and you just answer. You don't think not to, and also to make him feel less stressed."*

Participant 5: *"To reduce anxiety for a small period of time."*

Three participants reported that giving reassurance could potentially decrease their own levels of distress and/or make their life easier. For example, **Participant 6** said:

"I do it because I know my mum says it's helpful, and in the short-term it sort of, it's easier for me in a sense because I know that if I don't she'd get distressed and it would, it would make things worse really."

It shows that I care

Five participants said that they provided reassurance because of 'love' or 'care' for the person suffering from OCD as the following example suggests.

Participant 2: *"Because she's my daughter and I can't bear to see her suffering and I don't know what else to do until we get again expert help, you know what that's like. It's all I can do, and I know, as I said in the thing (earlier) I know it's not the way to go, I realise this very clearly, but I just don't know what to do."*

It is not their fault

In four interviews participants said that the OCD sufferer was not to blame for persistently seeking reassurance because the behaviour was part of OCD and thus not under the sufferer's control. Consequently they felt that giving reassurance was an integral part of their role as a carer and a way for them to show support:

Participant 4: *"X has had this 17 years now so when he first had this, I really didn't understand anything about it and I just thought 'oh we've just had a baby girl' and I just thought it was the shock of being a father, and so my react to start with was you know 'come on, pull yourself together, there's nothing wrong' but as time has gone on I understand it a lot more now and I know that he can't help it. It's one of those things that he's got and we have to learn to manage it."* **Interviewer:** *"So you typically react with providing reassurance?"* **Participant 4:** *"Yes, I'm very straight forward now."*

CARER'S RELUCTANCE TO WITHHOLD REASSURANCE

As part of the interview, participants were asked to describe how the person suffering from OCD reacts and feels when (or if) reassurance was withheld from them, i.e. if the carer simply refused to give or ignored any requests for reassurance. This overarching theme is meant to reflect participants' reluctance or hesitation to withhold reassurance. Participants described how not responding accordingly to requests for reassurance could trigger a negative emotional response, particularly increased anxiety in the OCD sufferer. They also described a negative behavioural response, where withholding reassurance led to confrontations and for some meant that the

sufferer's basic functioning, in terms of eating food and drinking water, was greatly impacted. Participants also reported that the decision making process is further complicated by the fact that they feel they cannot utilise other alternative strategies when reassurance is sought from them. In other words, they often find that giving reassurance is their only option.

Negative Emotional Response

Seven participants said that withholding reassurance would cause a negative emotional response typically in the form of increased anxiety (mentioned by five out of ten participants):

Participant 6: *She gets a lot more anxious. I have tried, because I, I've tried different ways of dealing with it myself, and I did try and sort of saying OK I'm not going to talk about this, we know that this an OCD type worry and I'm not going to engage in talking about it. And that really heightened her anxiety and made her quite distressed, and it didn't seem to help and so yeah, I think certainly, sort of not listening to her worry seemed to be worse, makes her more anxious."*

One participant mentioned his partner becoming very frustrated when reassurance was withheld which could result in him using alcohol as a way of tackling his anxiety:

Participant 1: *"He can get very frustrated... I mean he's not aggressive as in he would never touch me or anything but you can see he is frustrated. Sometimes he can turn to alcohol so he'll drink to try and suppress the frustration or anxiety, but he never... he wouldn't do anything, he wouldn't sort of lash out or anything."*

Another participant felt that withholding reassurance triggered feelings of hurt or upset:

Participant 9: *"Well I think there certainly are situations where he's mentioned things and I haven't said something reassuring. Oh, I don't know, you don't always feel like it. And he's upset, because I'm not backing him up or because he feels I don't understand, or because he's upset about a situation to begin with and having someone reinforce to him that that was the wrong thing to do or say, or that it's too upsetting and distressing and he feels hurt and upset."*

Negative Behavioural Response

Five participants said that withholding reassurance triggered a negative behavioural response in the sufferer. For example, **Participant 2** described how failing to reassure her daughter, who was experiencing severe contamination fears, would impact on her basic functioning:

"...If I don't [give reassurance] she will not eat, she will not drink, she will not get up out of bed, she will not dress, she will not wash."

Similarly, **Participant 3** said:

"I think, you know, quickly it would spiral to something that could get quite out of control. She just wouldn't be able to function properly, wouldn't be able to think and do things properly. I could see it getting really quite out of control."

Another participant (**Participant 8**) described how withholding reassurance from her partner, who had fears about accidentally harming other people, led to confrontations:

"... if it's quite a severe thing I think he could flip, you know it could be cause of, I don't know, he's got cross for. You know, if I've almost refused to do something he says Oh I'm never going to go in the car again. And some things he's threatened with are just not feasible. And it's just not worth doing; it's just worth saying, Yeah it doesn't exist. For me it's just that."

Not knowing what else to do

During the interview, participants were specifically asked to share their ideas or views on how to cope without giving reassurance. Overall they reported not being aware of any other effective solutions/strategies and more than half of the participants reported what could best be described as feeling completely helpless against persistent reassurance seeking:

Interviewer: *"Do you have any ideas to cope without giving reassurance?"*

Participant 10: *"I am too frightened of even trying to."*

As reported earlier in the interview, some participants reported having tried various different 'tactics' or 'strategies' with mixed results. For example, **Participant 6** said:

"... I have tried, I sort of read books on it myself when she was displaying the symptoms of OCD, and I did try, like, either not talking about it, not entering into the discussion, which made her very anxious and didn't seem to work at all. And also repeating a certain phrase so that, you know saying "you know that won't happen", and every time she asks the question I would say the same answer. But again that was just really anxiety-provoking for her. So there were kind of things that I tried myself, but no, I don't really know other ways to deal with".

Four participants out of ten said they had tried to use deflection or de-focusing. For some that appeared to help occasionally:

Participant 5: *"... [I] redirect her to use strategies that she has already learnt through therapy and guidelines to do at home to manage her OCD, so for me it's about redirecting."*

But for others that seemed to make matters worse:

Participant 1: *"... sometimes I wouldn't answer him or I would deflect or do something, but that makes him more anxious and I don't want to see him more anxious."*

CARER'S PERCEIVED IMPORTANCE OF CORRECT RESPONSE

This overarching theme represents the process that takes place when the OCD sufferer is responding to the reassurance (and processing it or doing something with it). As part of the semi-structured interview participants were asked how long it takes until they stop giving reassurance and also to reflect on how closely they felt they were listened to (monitored) when communicating the reassurance (either verbally or non-verbally). They were also asked to discuss

the consequences of not thinking seriously or looking casual when responding to requests for reassurance.

The analysis highlights interesting differences in some of the features (criteria) involved in reassurance; or more specifically how OCD patients can differ in what they find important or necessary for reassurance to be helpful, trustworthy or convincing. Some OCD sufferers appear to place strong significance on the 'correctness' of the response they get where, for example, certain facial expressions must be either present or absent for reassurance to have the desired effect. Equally, 'just right feelings' appear to play a role as well, since some participants described having to give reassurance until negative feelings experienced by the OCD sufferer had dissipated. Consequently, some caregivers described the process being very time consuming, spending up to 20 minutes offering reassurance or even few hours a day in the more severe cases. Some participants also described the significance their loved one placed on them being extremely attentive and taking all requests for reassurance very seriously. Failing that typically resulted in more persistent reassurance seeking or meant that the carer was unsympathetic towards the sufferer.

Needing to do it correctly

Three participants reported that they had to give reassurance in the 'correct' way for it to work. This could for example include the absence or presence of certain facial expressions (e.g. happy looking face) while reassurance was communicated. The same participants felt that they were being listened to very carefully during the process and had been criticized if their reassurance was not considered good enough. These results highlight the various components involved in reassurance, i.e. it is not just about what people are saying but also about how they are saying it. The following participant describes this very clearly:

Participant 10: *"...I have to look her directly in the eyes, not be distracted, and have a happy smiling face, and the second time or the third time that she asks it, she comes right close up so she's looking right into my eyes and if she happens to be in a particularly stressed mood for some reason, there have been occasions where she's asked me not to blink. She has to have the reassurance without me blinking at all."*

Interviewer: *"And does she ever question the content or quality of your reassurance?"*

Participant 10: *"No because I do it correctly."*

Not taking it seriously means that I do not care or that I need to do more of it

Three participants said that if they looked casual or appeared to be not taking the request for reassurance seriously it carried the suggestion that they did not care for the OCD sufferer.

Participant 4, for example said:

Participant 4: “...it would make him feel very much as though I didn’t care. It comes across as though ‘Oh god, here we go again.’ With your facial expressions you cannot do that. You have to make them feel safe.”

Others said that when they expressed dis-interest it meant that further reassurance was sought:

Participant 10: “She would continue until I did it correctly.”

CARER’S PERCEIVED INTERPERSONAL COST

This overarching theme reflects the negative emotional reaction that is elicited in participants when reassurance is sought from them. For example, they reported that persistent reassurance seeking had a negative impact on their relationship with that person and feelings of anger, disappointment, upset and particularly frustration were common. These negative emotional reactions appear to be related to the participants’ experiences and beliefs about the counter-productive effects of providing reassurance and also their limited access to other (potentially more helpful) approaches/reactions to deal with persistent reassurance seeking.

It makes me feel bad

Eight participants out of ten identified with feelings of anger, frustration, upset and disappointment as a result of being constantly asked for reassurance. For example, **Participant 8** said:

“[I feel] more upset than angry. Also frustrated, you know, I want him to stop asking me. And more for him, you know, I can’t say stop thinking about it. I sometimes say can’t you think about something else? Don’t you have anything else to think about? You know. I know he can’t control it, well he can control it to some degree, but it’s almost like, why can’t he think about other things? If he’s thinking about that so much why can’t he start thinking about other things, as in good things? So it’s more frustration. But angry and upset... yeah on stuff that I can’t change and I don’t know how that we can move forward on it unless he confronts it.”

Further negative emotions were also expressed by the participants. In five cases, feelings of guilt appeared to be triggered either after they had expressed their anger or frustration, or because they felt that by giving reassurance they were making false promises. Examples of these were highlighted by Participant 6 and Participant 10:

Participant 6: “I do sometimes get angry and I feel terrible afterwards... But because I know my mum’s an intelligent woman, I find it very frustrating that she’s asking me this ridiculous question, so yeah, I do get quite angry. But then it upsets me to see her upset by it, it’s a bit of both really.”

Participant 10: “I felt guilty and worried because I know that I can’t promise that X won’t die...”

FRUSTRATION

One particularly interesting observation made while reading through all the interview transcripts was how frequently the participants reported feeling frustrated as a result of being persistently asked to provide reassurance. In fact this 'superordinate' theme cut across most of the other overarching themes.

Participant 5: *"I get frustrated, at my most patient I'll be ok, I mean I can completely understand where it's coming from but then if I'm feeling a bit less patient then I can be frustrated and annoyed, mostly because I know she knows what's going on, so that is particularly frustrating and then also knowing that it doesn't really help, and it doesn't help in the long-term management of OCD. That's why I find it frustrating. Mostly because I know she knows, that's the most frustrating thing".*

The caregivers also felt that the same emotion, i.e. frustration was commonly experienced by the OCD sufferers as the following examples suggest:

Participant 7: *"...he looks a bit frustrated because he knows he's asking something to do with his OCD and I know it's to do with his OCD, and he looks a bit kind of embarrassed that he's kind of opening up and being like that with me. I think he'd rather try and hide it but I think it comes out in that way."*

Participant 3: *She kind of, you can see, you can tell she's desperate for someone to reassure her, so she really does kind of reach out and she's like, you know, kind of, just tell me I'm normal, tell me I'm sane, tell me I'm not going crazy. [asking for] any kind of relief, and just like frustration that she thinks that way."*

Discussion

The purpose of the present study was to explore caregivers' understanding and experiences of excessive reassurance seeking (ERS) within the context of OCD. This was done using a semi-structured interview which consisted of questions about how caregivers define reassurance; how they think it works; what impact ERS has on their relationship with the OCD sufferer; why they give into requests for reassurance and what they think drives OCD patients to engage persistently in this interpersonal behaviour. Although the results confirm how complex reassurance is for those who provide it, without exception participants reported experiencing a sense of frustration as a result of being repeatedly asked to provide reassurance. This is in line with the 'family accommodation literature' where caregivers commonly report negative feelings, including frustration due to the patient's OCD symptoms (e.g., Ramos-Cerqueira et al., 2008). Frustration is a complicated emotion and typically an aversive emotional state to be in. In clinical settings frustration is commonly associated with compulsive checking. The emotion is related to anger or disappointment and typically triggered in situations where people experience that their goals are not being met or are blocked. When confronted with requests for reassurance, carers inevitably give in, although they clearly understand the long-term counterproductive effects. Why then give

it? The short answer to that question is that giving reassurance is experienced as effective; it provides some relief and can be helpful 'on the day' both for the sufferer and the caregiver. Where giving reassurance makes it possible for both individuals to 'move on' as opposed to spending hours in torment most people would understandably give reassurance. Equally importantly, caregivers simply do not know what else to do or offer – which is then further complicated by the belief that giving reassurance makes OCD worse. Thus, it seems that they are 'stuck' and their goals are not being met (e.g. reassurance seeking does not stop, the OCD problem is maintained and they are essentially doing something they do not want to do). Consequently they feel frustrated with the situation they are in.

Some participants described having tried various ways of substituting reassurance with something else without any effect, while others talked about being too afraid, of the consequences of withholding reassurance, to even try. Another justification for giving reassurance (apart from the shared relief it offers), is that providing reassurance has the potential of communicating love, care and concern for the person suffering from OCD where withholding it can suggest the opposite. Caregivers reported other concerns about withholding reassurance, such as causing more emotional suffering, triggering a negative behavioural response in the form of anger, aggression, threats, or in some severe cases a refusal to eat or drink. There have been speculations that certain OCD symptoms, specifically compulsive checking, are related to increased levels of anger in sufferers. For example, Rachman and Hodgson (1980) wondered if anger could be a product of the frustration that results from feeling compelled to carry out a checking ritual that has no evident solution. It could equally be the case that anger is secondary to the general distress that is associated with suffering from OCD (Radomsky, Ashbaugh, & Gelfand, 2007; Whiteside & Abramowitz, 2004; Whiteside & Abramowitz, 2005).

This study also provided insight from the perspective of caregivers into what takes place during the course of the provision of reassurance. Some participants described how they were required to give reassurance in the 'correct way' where careful attention was paid to their answers and body language. This included criticizing their answers, analysing the tone of their voice, and scrutinizing their faces. Failing these 'standards' typically triggered more persistent reassurance seeking and an increase in negative feelings. These factors are very similar to the counterproductive 'stop criteria' which Salkovskis (1999) and Wahl, Salkovskis, and Cotter (2008) suggested that some obsessional patients follow in response to the perception of threat and responsibility for harm. Applying this framework would suggest that reassurance seeking stops when various subjective criteria, such as internal states of feelings or moods, and objective criteria (external observations), have been fulfilled. For example, the person giving the reassurance must look in a certain way (objective), their tone of voice must sound 'confident'

(objective) and the sufferer has to feel completely rid of anxiety (subjective). An implication of this is that the behaviour becomes more persistent and prolonged because fulfilling all the 'necessary' criteria is almost (if not entirely) impossible. Salkovskis and Wahl (unpublished) reported findings where compulsive checkers rated objective and subjective criteria more important compared to anxious and healthy controls. They also reported using more criteria for the decision to terminate a check; found it more effortful and rated more criteria as extremely important in comparison with the control groups.

Comparison with other Qualitative Research Examining ERS within the Context of OCD

To the author's knowledge no other studies have exclusively focused on caregiver's understanding and experiences of reassurance seeking. However, the present study is a follow-up study from Kobori et al. (2012) protocol, where individuals suffering from OCD were asked to reflect on their experiences of reassurance, using a similar interview structure. Thus, findings from these two studies can be matched to examine similarities and differences between caregivers' and OCD sufferers' understanding and experiences of excessive reassurance seeking. Consistent with the present findings (and also Parrish and Radomsky, 2010), Kobori et al. (2012) found that the function of reassurance for OCD patients is to deal with the perception of threat. The authors concluded that reassurance seeking is a form of obsessional checking, motivated to remove all elements of uncertainty and dispersing the responsibility of harm onto others. According to the authors this was reflected in terms of how the OCD patients described striving to achieve a feeling of complete certainty, perfection or being right when seeking reassurance. In comparison with the current findings, intolerance of uncertainty was endorsed and manifest in the present study in terms of how caregivers defined reassurance as 'saying things will be ok, clarifying or confirming' and in terms of how some participants were required to provide reassurance in the 'correct' way. In comparison to Kobori and colleagues' findings, diminishing responsibility for harm was slightly less frequently endorsed as a function of reassurance seeking. It featured in some of the interviews but was not considered to be a subtheme. However, it is argued here that this is to be expected since the manner in which the 'dispersion of responsibility' is expressed is mostly hidden from carers. In other words, even if many OCD patients' intention is to diminish responsibility for harm when seeking reassurance, they are unlikely to directly express this in comparison with for example the need to feel less anxious. Another strand of research where qualitative methods were employed to examine ERS in OCD patients (Parrish & Radomsky, 2010) also reported that diminishing responsibility for harm was rarely endorsed as a principal component for reassurance seeking. Similar reasons were used to explain this absence. We must also take into account the possibility that the dispersion of responsibility is not a defining feature of reassurance seeking

within the context of OCD. Further research is clearly needed to answer this question. Equally, this may be a result of the current data collection method, i.e. participants were not directly asked about the dispersion of responsibility.

Further comparison with Kobori et al. (2012) shows that carers and OCD patients are fully aware of the short-lived effects of reassurance and realize that it is counterproductive. Thus, it should not be sought and equally not provided. Interestingly, this belief does not prevent reassurance seeking or the provision of it. Also, as stated above, both studies revealed the various criteria that need to be fulfilled for reassurance to have its desired impact, such as absence or presence of certain facial expressions, frequency of the provision of reassurance and the correct tone of voice. With regards to interpersonal problems, caregivers admitted that ERS put strain on them and impacted negatively on their quality of life. OCD patients are aware of this (Kobori et al., 2012) and as a result may try to terminate the behaviour (Parrish & Radomsky, 2010) or employ other strategies, such as seek reassurance in hidden ways or become very careful in choosing the 'right' people at the 'correct' time to minimise confrontations (Kobori et al., 2012). Most of the time these attempts fail - the obsessional belief overrides everything and reassurance is sought.

Study Limitations

An important limitation of this study relates to the generalizability of the findings. The sample size was relatively small and consisted mostly of women. Furthermore, the recruitment procedure was restricted to two specialist anxiety clinics and self-help organisations. This means that the participant group consisted of either caregivers whose family member was at the more severe end of OCD (and was seeking help for their problem), or caregivers who were actively seeking some kind of support (via self-help organisations). This affects the generalizability of the findings, as they may not necessarily represent what goes on in less severe cases of OCD, or in the caregivers of OCD sufferers where neither person is actively seeking professional help/support. Also, the caregiver sample was mostly comprised of white females. Thus, cultural variations in excessive reassurance seeking are unlikely to be identified using this sample. Furthermore, these findings may not offer insight into how males understand and experience excessive reassurance seeking within the context of OCD. It seems plausible that there are cultural and gender differences when it comes to both the seeking and provision of reassurance. These sample issues need to be taken into account when the results are considered as they might mean that the themes that were extracted may not fit to the broader community of caregivers of OCD patients. There may also be a discrepancy between how caregivers describe reassurance and what actually takes place in real life. These findings require replication using a larger sample (with equal distribution and more diverse cultural backgrounds) of caregivers of OCD patients compared with caregivers of people experiencing other mental health problems, such as depression and other

anxiety problems where ERS occurs (e.g. health anxiety). Furthermore, qualitative analysis of the type reported here relies on researchers' interpretations of the data. This poses threats to validity due the potential bias when the researcher interprets the participant's responses. Efforts were made to minimize this bias, for example, by seeking regular supervision and employing another researcher who separately coded one third of the data and scrutinized the interpretations. For future research it would be helpful to have the additional researcher code the entire data set and develop his/her own thematic map to allow for more thorough comparison.

Implications for Treatment

This finding has implications for treating reassurance seeking within the context of OCD and perhaps other emotional problems, such as health anxiety, where ERS frequently forms part of the presenting problem. One key finding is that caregivers feel unable to cope without giving reassurance – it is the only option they have got. Understandably this causes upset and frustration because they feel stuck. They know that reassurance is only 'helpful on the day' and simultaneously they are only feeding the OCD.

The results clearly highlight the importance for therapists to understand and examine the interpersonal context in which reassurance arises. It is suggested here that therapists conceptualise reassurance seeking as a form of safety-seeking behaviour, perhaps best understood as a verbal compulsive checking behaviour. The author suspects that cognitive behavioural therapists are commonly guided by exposure and response prevention principles when they treat excessive reassurance seeking. This usually takes the form of encouraging the patient to stop seeking reassurance (even ignoring their requests) and asking family members to withhold any reassurance. Although this makes a lot of sense from a behavioural perspective (Rachman, 2002) it is argued here that a more subtle approach is needed particularly in severe anxiety problems and relationships consumed by reassurance. So how should we be treating ERS? Ideally, good treatment should of course involve helping the sufferer stop seeking reassurance which feeds his or her anxiety problem. Clinically, that is often easier said than done. However, instead of focusing on 'stopping reassurance' it is argued here that it is more effective to help the sufferer to shift from seeking reassurance and engage in a different, non-pathological interpersonal behaviour. That is, a behaviour which does not help to maintain the problem. More precisely, it is argued here that sufferers of anxiety problems should be helped to make the shift from seeking reassurance to seeking support – presented within a 'theory A versus theory B' framework (Salkovskis, 1999). This 'new approach' to treating ERS is discussed in much more detail throughout this thesis. However, at this point it is important to mention that we are still only at the beginning stages of understanding how this could possibly be done. Thus, before applying this intervention it is of critical importance to gather information about how people

suffering from anxiety problems understand the concept of support and how it is different from reassurance. The following study aims to provide some of those answers by examining these concepts in clinical populations where excessive reassurance seeking commonly forms part of the presenting problem, that is, OCD and health anxiety.

Chapter 4:

Support Seeking as an Alternative for Reassurance Seeking: A Qualitative Study

We have seen in previous chapters how excessive reassurance seeking (ERS) tends to take a grip on peoples' relationships and lives. Clinically, this is particularly likely in severe cases of OCD and health anxiety, where in some instances ERS completely dominates the sufferer's interactions with other people, including carers and medical professionals. The latter group is particularly relevant for health anxiety for obvious reasons. Given that, in the absence of any alternatives, reassurance can help anxiety sufferers and their caregivers to get through daily routines more easily (Salkovskis & Kobori, in review), engagement in ERS is understandable from both perspectives. Equally, it is not uncommon for medical professionals to consider reassurance to be an essential and logical part of consultation and beneficial in terms of decreasing patients' feelings of anxiety (Dowrick, Ring, Humphris, & Salmon, 2004; Howard & Wessely, 1996). This is of course very likely to cause problems in the long run for vulnerable individuals - reassurance not only prevents the sufferer from disconfirming his or her threat beliefs, but it is also likely to cause difficulties in his or her relationships with other people, such as arguments and feelings of frustration like we saw in chapter 3. Furthermore, in clinical settings it is not unusual for clinicians to hear carers describe how the sufferer becomes angry with them when reassurance is not provided, yet at the same time providing reassurance can be very frustrating for the carer. The complexity of this situation is highlighted by evidence that accommodating behaviours are associated with greater OCD severity and poorer treatment outcome (e.g., Ferrão et al., 2006; Storch et al., 2007). To the author's knowledge, similar research has not been done within the context of health anxiety. In fact we know very little about the similarities and differences in function and consequences of excessive reassurance seeking across different disorders.

As previously reviewed, there have been calls for 'family assisted' (e.g., Flessner et al., 2011), or more recently 'partner assisted' (e.g., Abramowitz, Baucom, Wheaton, et al., 2013), treatment interventions for OCD. These have shown mixed results. Similar treatment developments have not taken place for health anxiety. As mentioned in the previous chapters, most family/carer based interventions have focused on teaching the family/carer to help with exposure based tasks as opposed to addressing directly interpersonal patterns or communications between the sufferer and his or her caregiver. However, there are some notable exceptions. In 2013, Abramowitz, Baucom, Boeding and colleagues, published a pilot study of a couple based cognitive behaviour therapy which involved more than just partner assistance with exposures. It should be noted that the treatment team involved both CBT therapists and couple specialists. Parts of the treatment focused on reducing symptom accommodation by helping patients to engage in other non OCD

related behaviours, in addition to helping the couples to communicate with each other more appropriately, i.e. behave in such a way that it does not fuel the emotional problem (see further Abramowitz, Baucom, Wheaton, et al., 2013). When benchmarked (effect size comparison) with findings from individual CBT for OCD the couple based treatment was found to be superior on measures of OCD symptoms and long-term changes (12-month follow-up) in OCD symptoms were found to be more substantial in comparison with individual CBT. In addition, relationship functioning was improved at post-test and was comparable to the results from couple therapy that focused exclusively on improving relationship functioning (see further Abramowitz, Baucom, Boeding, et al., 2013). The authors have published case examples to illustrate the techniques used in the treatment programme (Abramowitz, Baucom, Wheaton, et al., 2013). With regards to the treatment of reassurance, the advice goes something like this: when the patient is confronting a feared situation, the carer “resists the temptation to distract the patient or provide reassurance or any other anxiety reduction strategies” (Abramowitz, Baucom, Wheaton, et al., 2013, p. 199). In situations where the sufferer struggles with overwhelming anxiety and cannot tolerate it “the partner provides support in ways the patient would like (but not using reassurance, rituals, or other accommodation behaviours)” (Abramowitz, Baucom, Wheaton, et al., 2013, p. 200).

An important aspect of the couple based treatment approach seems to be helping the partner to offer *emotional support* and getting the sufferer and carer to work together as a team - the authors talk about the importance of teaching patients and their carers to share their thoughts and feelings when distressed as opposed to doing (or helping with) rituals. The authors are not explicit about what they mean by *emotional support*, but it seems (at least to some extent) to echo what has been said earlier in this thesis about the seeking/provision of support (see page 20-23). As a reminder, it was argued that the motivation for seeking support is entirely different from the motivational factors associated with safety-seeking behaviours, such as reassurance seeking - the person’s intention is to seek encouragement and confidence and assistance for *coping* with distress. Thus, in the context of cognitive hypothesis, by substituting reassurance with support the individual’s perception of threat should not be reinforced.

Support Seeking and Giving in the Context of Emotional Problems

Support can mean different things for different people. There are numerous, seemingly very different expressions of support seeking and giving. How can we then know that the same word applies, i.e. support, in a number of different situations? The answer must be that ‘support’ (as well as other psychological terms) has some fixed core meaning which we are able to define (Smedslund, 2011). The author believes that people’s experience of feeling supported, can be understood in terms of one necessary condition, namely the experience of having been helped to *cope with feelings of distress*. With this in mind, the author argued in chapter 1 that support can

be understood and defined as an *‘Interpersonal behaviour, verbal or non-verbal, that is intended to get (or give someone) encouragement, confidence or assistance to cope with feelings of distress’*.

To the author’s knowledge there is no previous work on ‘substituting support for reassurance’ (apart from what was reviewed here above). However, ways of making CBT treatments more tolerable and acceptable for patients are frequently discussed. For example, in chapter 2 we saw how world leading experts are now encouraging the use of what they call ‘safety behaviours’ in the treatment of anxiety problems such as OCD as illustrated in the following quote: *“Perhaps the biggest advance, then, is to consider ways to increase the acceptability of treatment without compromising efficacy. One such way may be to be less dogmatic regarding the counterproductive effects of safety behaviour...”* (Shafran, Radomsky, Coughtrey, & Rachman, 2013, p. 6). The authors specifically say that: *“It is undoubtedly the case that some safety behaviours are unhelpful”* (Shafran et al., 2013, p. 6) and they specifically mention reassurance seeking as being a very problematic safety behaviour that should be refrained from. However, they also say later in the paper that: *“Nevertheless, there are some safety behaviours that may actually be helpful insofar as they encourage patients to obtain information that could disconfirm their fears”* (Shafran et al., 2013, p. 7). When a clinician is confronted with a situation where a patient refuses to engage in perhaps one of the most effective CBT treatment interventions (in terms of cognitive and behavioural change), i.e. behavioural experiments, the clinician must try his best (with any means) to change the patient’s mind (Bennett-Levy et al., 2004). Otherwise the risk is that therapy will have limited effect. Shafran et al. (2013) take a hypothetical example of a patient who spends hours ordering and arranging objects to prevent bad things from happening, making him housebound. They set up an experiment with the patient where he is asked to see what happens if he spends no more than ten minutes ordering and then leaves his house. To make this experiment more acceptable they tell him to take a photo of the objects which he can then look at if the anxiety starts creeping in. The authors invite the reader to consider if the photograph is counterproductive - are they simply replacing one compulsion with another? The authors argue that that is not the case. It is argued here that the answer is: *“it depends”*. Here is why: if the patient would start taking photographs every time he leaves the house, a new compulsion has been replaced with another and his OCD is likely to get worse. However, high frequency is not necessarily what makes the behaviour problematic. It all comes down to the patient’s intention. As long as the patient’s intention is to use the photograph as a way to *approach* the threat as a part of therapy – to challenge/confront and test out his beliefs– that is beneficial and we would not be replacing a new compulsion with another under such circumstances. Once again we are reminded about the importance of taking into account the motivational context.

What Shafran and colleagues (2013) have very helpfully done is to bring our attention to the importance of helping patients to engage in behaviours which help them to confront what they fear. They have referred to them as ‘judicious safety behaviours’ (e.g., Rachman et al., 2008), but in this thesis they are referred to as *approach supportive behaviours* where ‘approach’ refers to the person’s intention to confront the perceived threat.

However, it should be noted that these types of behaviours have always been part of psychological treatments, in particular CBT, but have perhaps never been specifically and clearly conceptualised in ways which allow them to be properly deployed by non-experts. For example, when treating someone with OCD, the therapist often models all kinds of behaviours, such as putting his hands into a lavatory, to help the OCD patient pass over the first treatment hurdles. However, after the treatment the therapist is no longer there to model interventions for the patient and the patient is left on his own to keep the OCD at bay. When patients come for treatment they typically present with a range of safety-seeking behaviours, which by definition are problematic. As an alternative, we as therapists must help them to engage in *approach supportive behaviours*, which are like ‘bicycle trainer wheels’ - something you can use to help you to test things out and through new experiences and understanding you start removing the wheels until they become completely unnecessary (Salkovskis, 2013).

The Purpose of the Present Study

In the preceding chapters the author argued that empirical studies must be guided by definitions and theoretical constructs that will then be verified, abandoned or adjusted in the course of investigations. However, it is obvious that the mere fact that a definition makes sense in the researcher’s mind does not necessarily mean it is true – or else there would be no untrue definitions. As mentioned in chapter 1, the suggested ‘new definitions’ of both excessive reassurance seeking and support seeking, are definitions aimed to provide a conceptual framework for studying the phenomenon of both concepts across disorders and assessing their psychological significance. With this in mind the aims of the current study are to offer insight into how people experiencing emotional problems, in particular OCD and health anxiety, understand these two concepts. Do they, for example, fit with how the author understands them? Furthermore, what are patients’ experiences of seeking reassurance as opposed to support? What motivates them to engage in these interpersonal behaviours? What effects does it have on how they feel and what they do?

With regards to reassurance seeking, we know from the literature that it is commonly conceptualised as a transdiagnostic process and treated similarly across different emotional problems, in particular OCD and health anxiety, although (at least to the author’s knowledge)

there has been no systematic investigations into how reassurance functions in different emotional disorders. For example, does it have the same effect on the perception of threat or anxiety or does it 'behave' differently in different disorders. Hopefully this study will shed some light on these issues. In addition, this study aims to explore how patients suffering from OCD or health anxiety, understand a different (potentially more helpful) interpersonal behaviour, i.e. support seeking. This obviously directly relates to the author's previous arguments for the potential benefits of helping people to approach a different response when they feel in danger. However, to the author's knowledge the literature has so far not compared those two interpersonal behaviours, at least not from this perspective, thus the hope is that this study will give us some empirical knowledge about whether it makes sense clinically to help patients shift from seeking reassurance to seeking support.

This study is exploratory in nature and follows on from the previous study where caregivers of people suffering from OCD were interviewed about their experiences of reassurance; it seeks to examine similarities and differences between excessive reassurance seeking and support seeking across patients diagnosed with OCD or health anxiety. Consistent with the methodology, which is thematic Framework Method (Gale, Heath, Cameron, Rashid, & Redwood, 2013; Ritchie, Lewis, Nicholls, & Ormston, 2013), detailed hypothesis were not made, but instead general predictions were put forward derived from the cognitive behavioural theory of anxiety and some of the existing literature on excessive reassurance seeking.

- i. The primary aims of reassurance seeking, in OCD and health anxiety, will be to prevent negative consequences such as threatened harm; as a secondary aim will be the reduction of perceived responsibility
- ii. The responsibility factors are believed to overlap between OCD and health anxiety with some difference in specificity
- iii. The primary aims of support seeking will be to get someone's help to cope with the person's distress.

Method

Design

In order to understand the nature of excessive reassurance seeking (ERS) and support seeking (SS) in OCD and health anxiety, a semi-structured interview schedule was developed with input from experienced clinicians and a service user. Thematic Framework Analysis (Gale et al., 2013; Ritchie et al., 2013) was then performed on the interview transcripts of OCD and health anxiety patients with the intention of exploring similarities and differences between ERS and SS in each patient group but also between groups. Also, the manner in which other individuals respond to requests

for reassurance seems to be an important factor in understanding the long-term negative consequences of this behaviour. Thus, the interview schedule included questions about the impact of support as opposed to reassurance.

Participants

Two groups (total n = 20) of participants were recruited; ten patients who met a principal diagnosis of OCD and ten patients who met a principal diagnoses of health anxiety. To be included in the study, participants had to report seeking reassurance within the context of their anxiety problem. Other inclusion criteria were: i) age between 18 and 70; ii) a good command of English. Exclusion criteria included: i) The presence of severe psychopathology (e.g. psychosis); ii) risk issues (e.g. suicidality); iii) learning disabilities; and, iv) comorbid diagnoses of OCD and health anxiety. Participants were all residents in the United Kingdom and were either recruited via NHS treatment centres (n=5), for example specialist anxiety disorder clinics, or through self-help organisations (n=15).

Materials

Diagnostic Evaluation

Psychiatric Diagnostic Screening Questionnaire (PDSQ; Zimmerman & Sheeran, 2003) is a brief, psychometrically strong self-report scale. It was designed as a screening measure to be used in clinical practice to help clinicians diagnose the most common Axis I emotional problems which feature in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994).

Structured Clinical Interview for Diagnostic and Statistical Manual for DSM-IV Axis I Disorders (SCID; First, Spitzer, Gibbon, & Williams, 1996) is a semi-structured, clinician administered interview for making major DSM-IV Axis I diagnoses. The interview schedule is divided into six self-contained modules that can be administered separately: mood-episodes; psychotic symptoms; psychotic disorders; mood disorders; substance use disorders; and anxiety, adjustment, and other disorders. Clinicians may customise each interview by administering only those modules of interest. The SCID is widely used both for research and clinical purposes and its psychometric properties have been reported to be excellent (First et al., 1996).

Symptom Measures

The Short Health Anxiety Inventory (SHA-I; Salkovskis, Rimes, Warwick, & Clark, 2002) is a 14 item self-report questionnaire which was specifically develop to measure clinical and non-clinical health anxiety independently of physical health status. Items assess excessive worry about health, awareness of bodily sensations or changes and feared consequences. The instrument has

demonstrated good reliability and validity in clinical and non-clinical samples (Abramowitz, Deacon, & Valentiner, 2007; Abramowitz, Olatunji, & Deacon, 2007; Salkovskis et al., 2002). A cut-off point of 18 or higher reliably and exclusively identifies people fulfilling DSM-IV diagnostic criteria for hypochondriasis, whereas people scoring 15-17 tend to be a mixture of hypochondriacal patients and people who are very health anxious but just miss criteria for the clinical diagnosis.

The Obsessive Compulsive Inventory – Distress Scale (OCI; Foa, Kozak, Salkovskis, Coles, & Amir, 1998) is a well established self-report measure within the OCD literature. It consists of 42 items, which can be used for OCD diagnostic screening, severity testing and symptom profiling. The scale composes of 7 subscales: washing, checking, doubting, ordering, obsessing, hoarding and mental neutralizing. Each item is rated using a 5-point Likert scale of symptom distress. A cut-off point of 40 and above suggests a diagnosis of OCD. The authors have reported good reliability and validity of the OCI both with clinical and non-clinical samples.

Responsibility Attitude Scale (RAS; Salkovskis et al., 2000) is a 26 item self-report measure designed to investigate general assumptions, attitudes and beliefs that people hold regarding responsibility. Items are scores on a 7-point scale ranging from 1 (“totally disagree”) to 7 (“totally agree”). The coefficient alpha reliability of the scale as well as test-retest reliability have been found to be satisfactory. The scale has no clinical cut-off criteria and is mainly administered in treatment to monitor changes in inflated feelings of responsibility.

Responsibility Interpretations Questionnaire - Belief (RIQ-B; Salkovskis et al., 2000) is a 16-item self-report questionnaire, which was designed to assess the belief in specific interpretations of intrusive thoughts about harm as experienced by the respondent, based on their identification of specific intrusions. Thus respondents are asked to write down their intrusions that they have had in the last two weeks followed by questions how much they believed various interpretations that are thought to be relevant to OCD beliefs. Each item is rated on a scale ranging from 0 (“I did not believe this idea at all”) to 100 (“I was completely convinced this idea was true”). This scale has no clinical-cut off criteria but can be a valuable treatment tool for monitoring people’s changes in unhelpful interpretations.

Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988) is a 21-item self-report inventory for measuring the severity of anxiety. It is typically considered the gold standard self-report measure of general anxiety symptoms. It was designed to assess anxiety severity among adults and is intended to distinguish anxiety from depression. Scores of 0-7 reflect minimal anxiety, 8-15 mild anxiety, 16-25 moderate anxiety, and scores above 26 indicate severe anxiety.

The BAI has received strong empirical support although it has been criticized for being mostly focused on physical symptoms of anxiety.

Beck Depression Inventory (BDI; Beck & Steer, 1987) is 21-item self-report inventory, rated on a 4-point scale, intended to measure the severity of depression. Scores of 0-9 indicate minimal depression, 10-18 mild depression, 19-29 moderate depression, and 30-63 severe depression. The BDI is widely used and its internal consistency is good although its test-retest reliability is poor (Beck, Steer, & Carbin, 1988). Although it was not specifically developed as a diagnostic tool it is generally accepted as a useful tool in diagnosing depression.

The Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) is a 9-item self-report measure assessing symptoms of depression. Symptom severity is rated on a 0-3 point scale, over the last 2 weeks. As a severity measure, the PHQ-9 scores range from 0 to 27. According to the authors, a score of 10 (as a single screening cut-point) suggests that the person is suffering from clinically significant symptoms of depression. The internal reliability, factors structure, validity, and sensitivity to change have all been reported to be good (Cameron, Crawford, Lawton, & Reid, 2008; Kroenke & Spitzer, 2002; Kroenke et al., 2001).

Generalised Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006) is a 7-item self-report questionnaire with good reliability and validity. Though designed primarily as a screening and severity measure for generalised anxiety disorder, it has also been found to be reasonably accurate in assessing for panic, social anxiety, and post-traumatic stress disorder (Kroenke, Spitzer, Williams, Monahan, & Löwe, 2007). According to the authors a score above 8 suggests clinically significant anxiety symptoms. The scale has been found to have good reliability and validity (Löwe et al., 2008; Spitzer, Kroenke, Williams, & Löwe, 2006).

Semi-Structured Interview Schedule

A semi-structured interview schedule was developed to understand the nature of excessive reassurance seeking (ERS) and support seeking (SS) within the context of emotional problems. In particular, the schedule explores similarities and differences between these two concepts, and how people understand and experience them. The interview assesses the content, triggers, function, consequences, and reasons for seeking reassurance or support. Additionally, the interview explores peoples' experiences of different kinds of reassurance/support and the extent to which each are helpful in particular circumstances, how long the effects last, and how people feel when reassurance/support is withheld. The structure of the interview involves two main sections; the first section focuses exclusively on ERS whereas section two focuses exclusively on SS. Questions in section one are repeated in section two with the only difference being the use of the word 'support' as opposed to 'reassurance'. In other words, the second part mirrors part one.

Initial questions were open-ended, for example: 'what in your experience is reassurance seeking?' This was intended to allow participants themselves to define the concepts to provide as close picture as possible of their own understandings (without forcing the researcher's definition onto them). The interviewer was allowed to share his definition of the concepts and any disagreements were discussed before moving on. Following on from that, participants were asked to identify a recent example of when they felt distressed (within the context of their emotional problem) and sought reassurance or support, and someone provided them reassurance or support. By this, the intention was to establish a patient perspective on the 'lived experience' and try to work out in detail what happens before, during and after reassurance or support is sought and provided. The remaining questions focused on exploring the participants' reassurance or support seeking behaviour beyond the specific example. By doing that, the aim was to get a good overall idea of why (how, etc.) they seek reassurance and support.

The semi-structured interview schedule was developed with input from clinicians with expertise in treating emotional problems. The developmental phase involved repeated meetings within the research team where interview questions were developed and concepts defined. A preliminary version of the interview was piloted with one healthy control and with one OCD patient where reassurance seeking formed part of the clinical problem. These participants were asked for their comments, in particular if they felt questions should be deleted, added or reworded. Their feedback was discussed with members of the research team and subsequently the interview was shortened and changes made to the introductory text.

The semi-structured interview schedule can be found in Appendix B.

The Reassurance Seeking Attitude Scale

After having gone through the first part of the interview schedule, which focused exclusively on ERS using qualitative methods, the participants were asked to fill in an eight-item questionnaire which was intended to measure their general beliefs about reassurance seeking quantitatively. Three clinical psychologists with expertise in treating anxiety problems generated an initial pool of questionnaire items which were thought to be relevant to ERS (based on theory, the current literature and clinical experience). On the basis of feedback from service users the final version consisted of eight items (see Appendix C). Each item was a statement, for example, 'I seek reassurance to feel less responsible', and participants were asked to rate the extent to which they believed these statements to be true when they sought reassurance. Three items (questions a, b, and c) were specifically designed to characterise the obsessive nature of ERS; two items (questions d and e) were taken from the depression literature (input reference); and the remaining three items (questions f, g, and h) focused on the effects of the behaviour and motivational factors. Participants were asked to rate how much they agreed with each statement

using a scale ranging from 0 ('I did not believe this idea at all') to 100 ('I was completely convinced this idea was true').

The Support Seeking Attitude Scale

After having gone through the second part of the interview schedule, which focused on support seeking, participants were asked again to fill in an eight item questionnaire which included almost identically worded statements as mentioned here above; the only difference was that the word *support* had been substituted for *reassurance* (e.g. 'I seek support to feel less responsible'). The reason for 'mirroring' these questions was to offer some further evidence that the participants defined and understood the two concepts differently.

Procedure

Potential participants who had volunteered to participate in the study were contacted by telephone, given information about the research and asked if they would like to participate. During the telephone conversation, the researcher did a preliminary screening of the participants' presenting problem to make sure that they fulfilled necessary criteria to participate. Potential participants who agreed to take part were sent a questionnaire pack in the post, including written information about the study and written consent form. They were asked to fill in all the questionnaires and post them back to the researcher. It was explained that the researcher would score the questionnaires and then contact them again to make an appointment for further assessment. Once all questionnaires had been scored, the researcher offered to meet with the potential participant in person or contact him/her over the telephone. When scores were above the clinical cut-off on the PDSQ for any given disorder, the relevant diagnostic section from the SCID was administered. Symptom measures were also used to aid in participants' diagnosis, for example, the Short Health Anxiety Inventory (SHA-I; Salkovskis et al., 2002) was specifically designed to assess clinical and non-clinical health anxiety and the Obsessive Compulsive Inventory (OCI; Foa et al., 1998) is helpful for measuring OCD symptom severity. The principal investigator (BH) who is a registered clinical psychologist with extensive clinical experience did all assessments. Any uncertainties about participant's diagnosis were discussed at a research team meeting where the principal investigator consulted two senior clinicians with extensive experience in the treatment and diagnosis of anxiety disorders.

Once the participant's eligibility was confirmed the principal investigator (interviewer) administered the semi-structured interview. The interviewer encouraged people to elaborate on their answers, and try to give as much information as possible avoiding a simple 'yes' or 'no' answer. The interviewer also prompted participants if he considered the answer required elaboration. Participants were encouraged to seek clarification if they felt unsure about particular

questions/items. The duration of an average interview was approximately 90 minutes. Each interview was recorded using a digital recording device and then transcribed verbatim (by independent transcribers). Each participant was given a £10 pound voucher as a token of thanks for their participation. The study protocol of this study was approved by NHS Research Ethics Committee (Ref. 12/SW/0288) and also received ethical approval from the University of Bath, Department of Psychology Ethics Committee (Ref. 12-148).

Data Analytic Strategy

With the semi-structured interview the aim was to explore participants' views and experiences of both reassurance seeking and support seeking. The researcher was interested in examining the different processes involved in reassurance/support. More specifically, how participants understood these two concepts, what motivated them to seek reassurance and support, their perceived effectiveness/helpfulness of seeking reassurance and support, and what happened (to them, to others) while reassurance or support was being provided to them? Thus, data were analysed using Framework Method which falls under a broad family of qualitative analysis methods and is most commonly used for the thematic analysis of semi-structured interviews (Gale et al., 2013; Ritchie et al., 2013). It allows themes to be developed both from the aims and objectives of the study (research questions) and from the narratives of research participants. Although the approach reflects the original accounts and observations of the study participants, it starts with a deductive approach from pre-set aims and objectives (Pope, Ziebland, & Mays, 2000).

The current data set comprised 20 transcribed interviews, which were coded and analysed according to the five stages of the thematic framework method (see below). Regular meetings between the research team (which consisted of the author of this thesis, two senior clinical psychologists and a research assistant) were held throughout the data analyses, allowing for further exploration of participants' responses, discussion of findings, and agreement on recurring themes. Analysis of the data was aided by the computer software package Nvivo (QSR, 2012).

The five stages of the framework method are (Pope et al., 2000):

- *Familiarisation* – This step involved immersion in the data, listening to the tapes and thoroughly re-reading through transcripts in order to list key ideas and important and recurrent themes.
- *Identification of a thematic framework* – Identifying all the key issues, concepts, and themes by which the data can be examined and referenced. This step was carried out by drawing on previous literature, theories and the specifics of the research

questions. New themes were also identified from issues which the subjects raised themselves.

- *Indexing* – This step involved applying the thematic framework systematically to all the interview transcripts.
- *Data charting* – During the charting phase the data were lifted from their original context and rearranged and grouped according to the emerging themes.
- *Mapping and interpretation* – Charts were reviewed, accounts of the two clinical groups were compared and contrasted, and connections made within and between codes, themes and cases/groups to explore relationships. This process was influenced by the original research objectives and by concepts generated inductively from the data. A thematic map was produced in order to summarise the data.

Results

Overview

The result section is split into four sections.

- i. The first section focuses on details of the participants.
- ii. The second section focuses on excessive reassurance seeking (ERS) where both clinical groups were combined into one group for the analysis.
- iii. The third section focuses exclusively on support seeking (SS). Interestingly, seven out of ten Health Anxious (HA) group participants could not identify examples where they had sought support within the context of their emotional problem. This only applied to one OCD participant. This difference between the groups was statistically significant. Consequently, the data from the support seeking part of the interview was analysed separately for each group (three HA participants versus nine OCD participants).
- iv. The fourth and final section examines participants' ratings on the two attitude scales that were specifically put together for this research, i.e. the Reassurance Seeking Attitude Scale and the Support Seeking Attitude Scale.

Section I – Participants' Details

Thirty-five people completed the diagnostic screening process. Two participants were excluded based on a diagnosis of comorbid OCD and health anxiety. Two participants were considered to be in recovery from OCD and thus excluded. Three were excluded based on a diagnosis of GAD as their primary problem; three on the basis of suffering from major depression; and one on the basis of suffering from an eating disorder. Twenty-four were considered appropriate for the

study, but four of them dropped out (3 OCD, 1 health anxiety). The final sample consisted of twenty participants (68.6% acceptance rate).

Demographic status and psychological characteristics of both groups are presented in Table 2. The OCD group consisted of nine females and one male. The mean age for the OCD group was 33.70 years ($SD = 10.64$) and the mean OCI score was 65.2 ($SD = 24.02$). On average, the OCD patients had been suffering from OCD for 19.9 years ($SD = 8.03$). The health anxiety group consisted of four males and six females and the mean age of the participants in this group was 34.40 years ($SD = 8.34$) and the mean SHAI score was 31 ($SD = 8.30$). On average they had been suffering from health anxiety for 9.7 years ($SD = 3.20$). The groups were similar in terms of age, ethnicity and employment status. Although there were more males in the HA group, Fisher's exact test revealed that the difference was non-significant, $p = .303$.

The PHQ-9 and the GAD-7 were used to measure whether there was good comparability between the groups on depression and anxiety levels. The OCD group scored on average 10.80 ($SD = 8.52$) on the PHQ-9 (depression measure) and their mean score was 12.30 ($SD = 4.57$) on the GAD-7 (anxiety measure). The health anxiety group scored on average 13.40 ($SD = 6.82$) on the PHQ-9 and their mean score on the GAD-7 was 14.20 ($SD = 5.77$). An independent samples t-test revealed that there was good comparability between the groups with no significant difference identified between the groups on depression (as measured by PHQ-9), $t(18) = -.753$, $p = .461$; or anxiety (as measured by GAD-7), $t(18) = -.816$, $p = .42$.

Table 2. Demographic and psychological characteristics of the participants

Demographic characteristics							Psychological characteristics							
ID	Gender	Age	Ethnicity	Employment status	Relationship status	Educational level	OCI total	SHAI total	PHQ9 total	GAD7 total	BAI total	BDI total	RAS total	RIQ total
Participants with OCD														
Participant 1	F	46	White	Paid work	Cohabiting	Postgraduate	86	10	22	21	37	42	148	84
Participant 2	F	31	White	Paid work	Single	Postgraduate	22	14	1	6	16	0	112	32
Participant 3	F	32	White	Paid work	Single	Degree	38	15	2	9	20	12	131	4
Participant 4	M	54	White	Paid work	Cohabiting	Degree	67	7	8	10	5	27	142	71
Participant 5	F	26	White	Paid work	Married	Secondary	69	6	23	17	26	34	132	63
Participant 6	F	26	White	Paid work	Single	Secondary	66	8	4	10	4	11	174	56
Participant 7	F	26	White	Paid work	Single	Degree	49	4	4	15	21	8	127	43
Participant 8	F	45	White	Paid work	Single	Secondary	105	22	15	14	12	19	173	70
Participant 9	F	24	White	Paid work	Single	Degree	68	31	20	13	36	39	173	100
Participant 10	F	27	White	Paid work	Single	Degree	82	15	9	8	8	33	161	54
Participants with Health Anxiety														
Participant 11	F	25	White	Paid work	Single	Degree	21	32	7	17	23	23	100	54
Participant 12	F	33	White	Paid work	Cohabiting	Postgraduate	17	21	3	4	11	13	102	59
Participant 13	F	40	White	Paid work	Married	Diploma	26	27	17	18	25	42	142	57
Participant 14	F	29	White	Paid work	Married	Secondary	27	34	16	18	34	25	141	64
Participant 15	F	41	White	Paid work	Cohabiting	Diploma	6	19	5	8	7	22	66	18
Participant 16	M	29	White	Paid work	Cohabiting	Degree	19	20	14	13	21	35	115	40
Participant 17	M	42	White	Paid work	Married	Diploma	32	35	16	8	16	10	105	^a
Participant 18	F	49	White	Paid work	Married	Secondary	16	40	23	20	44	45	141	61
Participant 19	M	23	White	Paid work	Cohabiting	Diploma	91	41	22	21	58	38	127	63
Participant 20	M	33	White	Paid work	Married	Secondary	19	41	11	15	32	40	120	56

Section II – Reassurance Seeking

Seventeen themes were identified which were aggregated into six overarching themes (see Table 3 for a summary). Although all subthemes were relevant to some extent in both groups, some differences were apparent between the groups in the proportions of participants who found that particular subtheme to be relevant to their ERS behaviour. Specifically, the OCD patients were more likely to be motivated to seek reassurance as an attempt to disperse their feelings of responsibility and wanting certainty, whereas the HA group was more likely to be motivated to seek it in order to 'repair their mood'. Also, both groups reported that there was an ideal way to reassure them, but the 'recipe' for this was different between the groups. For those with HA, ideal reassurance typically came from a doctor and included (medical) tests, whereas the OCD patients were much less focused on seeking 'expert advice' and put more emphasis on various details during the process, such as how the 'reassurer' looked and sounded. In addition, although both groups described feeling much worse when they were unable to get reassurance, the OCD patients described a much broader emotional response. Interestingly, the provision of reassurance also seems to have more positive effects (in terms of changing how people feel emotionally) in the presence of OCD relative to HA. Finally, although both groups felt that reassurance was counterproductive, the OCD group participants appeared to identify much broader counterproductive effects than the HA group.

Table 3. Themes and subthemes for excessive reassurance seeking

Overarching theme:	TOPOGRAPHY OF REASSURANCE SEEKING
Subthemes:	<ul style="list-style-type: none">- Triggers- The act of approaching other people when I am feeling fearful- Resistance- It takes many forms
Overarching theme:	MOTIVATIONAL FACTORS
Subthemes:	<ul style="list-style-type: none">- Perception of threat and the need for safety- Mood repair- Dispersion of responsibility- The need for certainty
Overarching theme:	REASSURANCE AS AN INTERACTIVE PROCESS
Subthemes:	<ul style="list-style-type: none">- There is an ideal way to reassure me- The importance of detail
Overarching theme:	THE IMPORTANCE OF HAVING IT
Subthemes:	<ul style="list-style-type: none">- Fears materialize- Feeling much worse and unable to cope- It can help
Overarching theme:	RELUCTANCE TO SEEK REASSURANCE
Subthemes:	<ul style="list-style-type: none">- Counterproductive emotional and behavioural effects- The same doubts quickly return
Overarching theme:	INTERPERSONAL EFFECTS
Subthemes:	<ul style="list-style-type: none">- It strains other people but can bring us closer- Frustration

*Note: Each overarching theme is shown in capital letters and **bold**. Subthemes are presented below the overarching themes and are printed in either red, orange or green colour. A 'traffic light analogy' was used to visually capture the differences and similarities identified between groups. The colour green reflects 'no difference'; the colour orange reflects 'some difference' - meaning that both groups found that subtheme to be relevant but in a slightly different way; and the colour red reflects 'difference' between the groups - meaning that a considerable higher proportion of participants in one of the groups identified with that theme.*

Thematic Map of Excessive Reassurance Seeking

In Figure 4, the thematic map is displayed offering a visual representation of the findings. This is presented here to give the reader an overall impression of the results before reading about each individual theme. The overarching themes are represented in uncoloured boxes whereas the subthemes are coloured according to 'traffic light analogy' (green = 'no difference' between groups; orange = 'some difference'; red = 'difference'). Given the colours, the topography of reassurance seeking was typically comparable across the groups, i.e. overall both groups described the behaviour in a similar way. Interestingly, the motivational factors were substantially different, with the main overlap being on one factor, i.e. 'perception of threat and the need for safety'. What took place during the interactive process of seeking and giving reassurance also differed to some extent between the groups. Although both groups felt that there was an 'ideal way' to reassure them - how this criterion was fulfilled differed between the groups. Furthermore, the OCD participants were much more focused on detail in comparison with those participants presenting with health anxiety. There was more commonality reported in the other themes. Both groups found it important to have reassurance but were also reluctant to seek it and mostly for the same reasons. Interestingly, the effects of having reassurance appeared to be more helpful for the OCD sufferers. Finally, the interpersonal effects of reassurance were typically comparable between the two groups. Overarching themes and subthemes are reported in detail below.

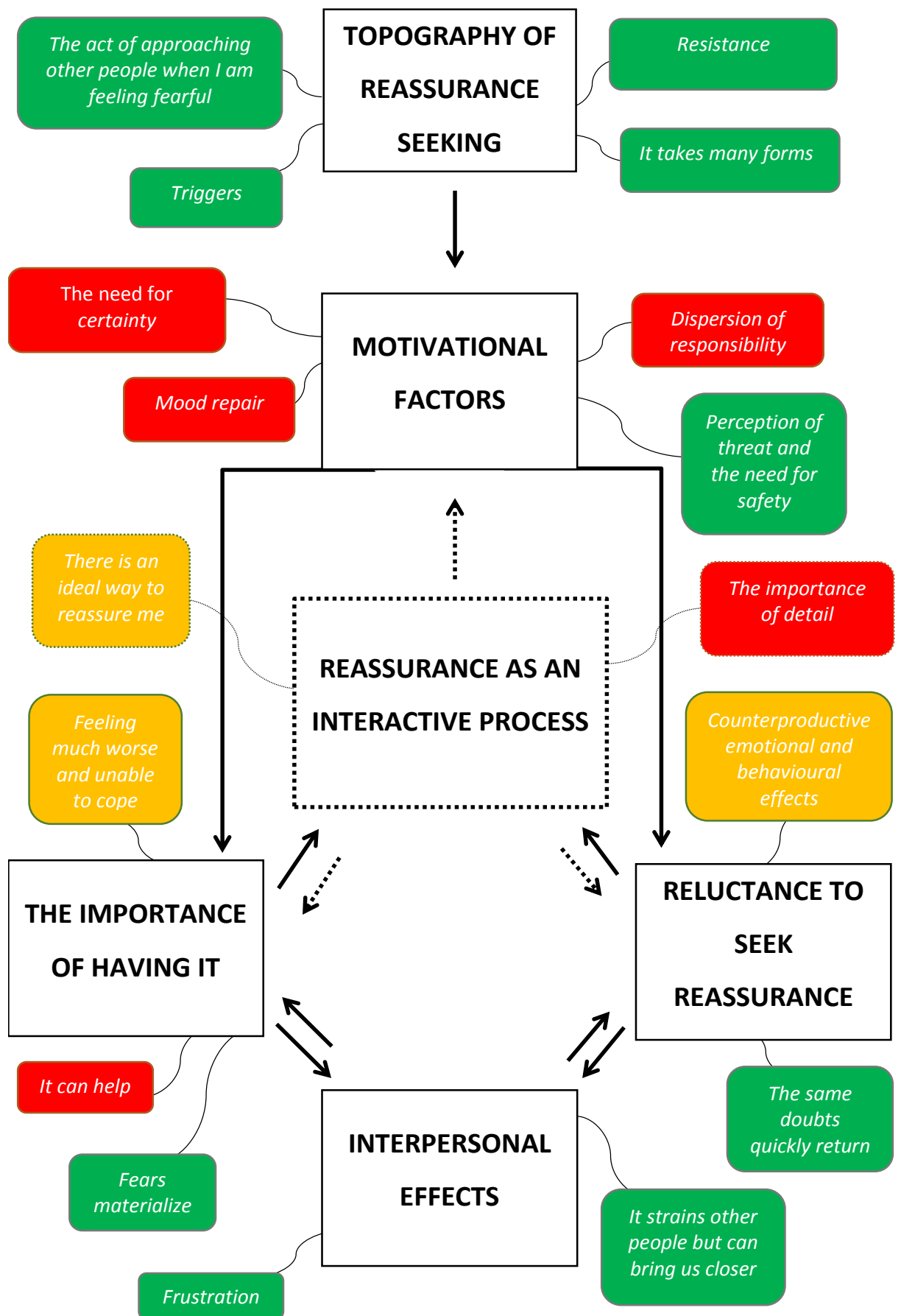


Figure 4. Thematic map of excessive reassurance seeking for OCD and health anxiety

Overarching Themes and Subthemes for Excessive Reassurance Seeking

TOPOGRAPHY OF REASSURANCE SEEKING

Various sections of the semi-structured interview consisted of questions aimed to investigate how OCD patients and equally people suffering from health anxiety understand and experience ERS (e.g. what triggers it, how is it sought etc.). This overarching theme is meant to comprise this, by describing some of the phenomenological aspects of the behaviour. Results revealed that the OCD patients seek reassurance as a reaction to intrusive thoughts or images about harm coming to themselves or other people and/or doubts, for example, whether they have turned kitchen appliances off. For obvious reasons, the HA patients said they were prone to seek reassurance in relation to their health fears, and ERS was typically triggered by bodily sensations which are interpreted as threatening. Both groups find reassurance seeking to be a repetitive behaviour and extremely hard (if not impossible) to control or refrain from. Participants in both groups described seeking reassurance quite directly, as opposed to hiding it, although all participants identified examples where they had sought reassurance in a hidden way.

Triggers

Crucial to participants' decision to seek reassurance is a negative meaning attached to the stimuli, situation or the event which took place. As expected, intrusive thoughts about health problems or catastrophic interpretations of physical sensations, such as pain, were a common trigger for ERS amongst the health anxious participants. For example, **Participant 15** said:

"...I hold a lot of tension at the top, in my shoulders and in my chest. If I get any pain in that area, in my chest or- because obviously that's where my heart is then I will seek reassurance about that for sure."

The OCD patients reported that the principal triggers of ERS were "doubts" (e.g. Ppt. 8; Ppt. 6; Ppt. 10; Ppt. 3), "anything to do with contamination" (Ppt. 5) or intrusive "thoughts" (Ppt. 2; Ppt. 4; Ppt. 7; Ppt. 9) typically with a harmful or violent theme. When **Participant 1** who suffers from OCD was asked about triggers, she said that feelings of anxiety and intrusive thoughts with a violent content triggered an urge to seek reassurance, as the following excerpt shows:

"I think when I feel- it's like a sick anxiety...[and when] I have thoughts, I had one the other day, if I see a pregnant woman I think 'I'm going to punch her in the stomach'. I have quite a lot, I've got a wee dog and I have thoughts about stabbing my dog and choking it. And it's very visual, I see it sort of."

The act of approaching other people for help when I am feeling fearful

When asked ‘what in your experience is reassurance seeking?’ all participants conceptualised it as an interpersonal behaviour where they approached other people they trusted (or other sources such as the Internet or books) for help, when they were feeling fearful. The following two participants, who both suffer from health anxiety, described reassurance as a behaviour which involved repeatedly asking other people questions about their health fears to help them feel less worried about their health:

Participant 18: *“It’s going back to people over and over again, for me it’s them telling me that everything’s okay and that I haven’t got anything seriously wrong with me.”*

Participant 16: *“...Erm.., really going to see other people instead of feeling anxious....Somebody to tell me there’s nothing actually wrong and I’m just being stupid because I focus so much on it that I actually, whether or not there’s a genuine illness there, I completely 100% believe there’s something wrong with me. And I need other people to almost say, look it’s just this, it’s just that.”*

Similarly, **Participant 7**, who suffers from OCD, described it as an interpersonal behaviour where she questioned other people or used other sources, to make sure nothing bad happened:

“Probably when you’re having thoughts going to someone or something to try and make sense in your mind and for them to tell you that nothing bad will happen and just having- It’s hard to describe as well, using the word reassurance, but just being able to get comfort from somewhere that you know it is just a thought and that nothing is going to happen as a result.”

Participant 10 (OCD), who suffers from compulsive checking, defined reassurance seeking as asking other people questions about whether she had done things correctly or in the right way

“For me reassurance seeking is asking someone else have I done something correctly, have I done something the right way? Basically am I a good person, am I doing this right? And as soon as I’ve got that reassurance from them, that’s good enough for me. So that’s kind of- it’s getting someone else’s sign off on my actions.”

All participants reported seeking reassurance mainly from their partner or other family members, with only two health anxious participants (out of ten) mentioning specifically seeking reassurance from their GP (or other medical staff).

Resistance

In the OCD group, all ten participants typically reported finding it very hard (if not impossible) to resist seeking reassurance. This was clearly illustrated by **Participant 1** who said:

"I feel I really need to ask this. I really need to ask this question. I really need to ask this question even though sometimes I think I know this is OCD: 'This is OCD, but I really need to ask this question.'"

Most OCD participants (eight out of ten) reported seeking reassurance daily, although this could vary, ranging from asking only once or twice a day to persistent questions. Eight OCD participants felt that their reassurance seeking was at times out of control as highlighted by **Participant 5** who said:

*"I sometimes know if I ask for reassurance it's going to really piss the person off, but I still need it. That need for it overrides that. **Interviewer:** 'Does your reassurance seeking ever feel out of control?' **Participant 5:** 'Yeah. There are times when I can hear myself asking reassurance and I'm thinking why am I doing it, I don't need to and it's just stupid and pointless, but I just feel this urge to do it anyway. Like I'm just not in control of it.'"*

Similar findings were reported by the health anxious group, i.e. eight out of ten participants said that they found it very hard to resist seeking reassurance and sometimes impossible. Similar to the OCD group, the frequency of reassurance seeking varied between the HA participants; three said they sought it at least few times a week; four participants reported seeking it daily or constantly; and the remaining three found hard to give an exact figure, as illustrated by **Participant 11:**

"...Erm..., I don't know it's really hard to say how often. I mean it's different every time. Sometimes I don't want to talk to anyone about it at all, sometimes that's all I want to do."

All ten HA patients reported that at some point in their lives their reassurance seeking had been out of control:

Participant 19: *"Take last year about the throat problem, that was the worst I'd ever felt with my health problems. And it just went out of control because I was constantly going to the doctors, constantly ringing my mum up or talking to my partner about what could be wrong with me it was just a constant, constant thing. Constantly looking on the Internet."*

Five participants reported this still to be the case at the time of the interview. When asked 'why they found it hard to resist seeking reassurance', the OCD patients gave various reasons. Overall, participants conveyed a sense of feeling unable to cope on their own with the fear or its consequences and thus needed to get other people involved, or a belief that getting reassurance from someone would provide some evidence that bad things had not happened or would not happen in the future. The following participant described how not getting reassurance would maintain her negative emotional state and thoughts:

Participant 9: *"I have to otherwise I won't feel any better or the thought won't go away."*

By contrast, the accounts of why the health anxious patients found it hard to resist seeking reassurance were more specific, i.e. overall they centred on the urge to know that they were not suffering from an illness that would kill them or have some terrible consequences, as illustrated in the following examples:

Participant 17: *"I need to know I'm not going to die soon. And I don't want to die. That's a big fear; dying."*

Participant 19: *"Because if I don't do it then something terrible will happen. I have to do it to prevent that."*

It takes many forms

Across the whole sample, participants described seeking reassurance in a range of ways (e.g. asking others direct questions versus hiding it in a conversation) and from various sources, for example, themselves, other people, the Internet, phone text messages, books and so on. When asked how they *typically* approached reassurance, nine out of ten HA patients said that they asked people they trusted *direct questions* in relation to their fears. In most cases this involved describing firstly their physical symptoms and then asking if the other person thought they were in danger:

Participant 18: *"I just say to him, I just tell- I mean he just is sick of hearing about my you know, ...erm..., my health I suppose really because I mean it's not even one thing each day, it can be several things throughout the day, ...erm..., you know and I'll say to him 'do you think I-' and the things that I'll say to him and I know I say to him the most 'do you think we ought to go to the doctor? Do you think I ought to ring the doctor?' That is what I say to him everyday nearly."*

Similarly, nine out of ten OCD participants said that their reassurance seeking most commonly involved asking other people direct questions. For example, when **Participant 5** was asked how she typically sought reassurance she said:

"I will tell them the situation and ask if it's something they would worry about or if it's OCD."

Although, direct questions were the usual approach for reassurance, one OCD patient, who suffers from severe checking compulsions, described how she sought reassurance by having her mother come into her room to 'confirm' that all appliances were turned off.

Interviewer: *"How do you typically seek reassurance?"*

Participant 8: *"...Erm..., asking my mum to check for me. My poor mother (chuckling) she deserves a medal."*

No difference was found between the groups in terms of what sources they used for seeking reassurance. That is, both groups reported using people, books, the Internet or phone text messages and so on. In addition, all twenty participants recognized seeking reassurance in subtle or hidden ways, where the intention was to seek reassurance without the other person knowing it. When **Participant 17**, who suffers from health anxiety, was asked for an example of hidden/subtle reassurance seeking, she said:

"I'll talk in general about health issues so maybe we're out and I'm with a friend or whatever and ...erm... I'll try and, it sounds really dangerous but think of ways to bring it into the conversation and that can be about maybe something in the news you know like really trying to bring it in without them thinking it's about me."

Similarly, **Participant 10** who suffers from OCD said:

"I'll pretend that I've left something somewhere, or I'll say if I'm not sure that I've turned the taps off in the bathroom, I'll say 'Oh look come and have a look at this, look, the tap's doing something really weird' and get them to come into the room, and then they'll look at the tap and go 'what are you talking about' and I'll go 'Oh it's stopped doing it now' and then I'll just walk away, and I know they're the last one to have looked at the taps so it's not my fault."

One OCD patient mentioned how watching other people do certain tasks provided her reassurance, without the other person realising what had happened:

Participant 7: *"...sometimes maybe watching them do those certain things that I'm not comfortable with that's reassurance to me. It's not directly talking to them. [Or] it might be where I talk to them and say 'Oh you did this' and they're doing things that I'm not comfortable with and I know that they've approached it and they've been fine and then maybe- maybe seeking reassurance from- and they don't realise and they don't know."*

With regards to *self-reassurance*, all twenty participants identified with that form of reassurance. Examples included: bringing to mind what doctors or others have said to them in the past, repeating phrases out loud (e.g. "it's off"), reading medical books, text messages, or diaries containing 'old reassurances' and surfing the Internet. Across the whole sample, all participants felt that self-reassurance was typically unsuccessful because they lacked trust in their own judgment, as illustrated by the following participants:

Participant 10 (OCD): "...it's because when I'm trying to reassure myself, I just don't trust myself. So I could be completely right but it's still not good enough until someone else has told me it's not good enough."

Participant 15 (HA): "I suppose I don't always trust my own judgement whereas I trust the judgement of other people."

MOTIVATIONAL FACTORS

The interview structure required participants to focus on a fairly recent incident where they had felt very distressed and sought reassurance (within the context of their emotional problem) and someone provided them reassurance. In addition, they were also asked more general questions about their experiences of reassurance, including, why they typically sought reassurance, what they were hoping to achieve etc. with the aim of identifying motivational factors. This overarching theme represents participants' motivations or reasons for seeking reassurance – their intentions – for engaging in this behaviour. In other words, what factors drive the behaviour and what is the person typically aiming to achieve when reassurance is sought? Four factors were identified: firstly, it is a way for them to deal with the perception of threat; secondly, by seeking reassurance they feel less responsible for whatever it is that they fear may happen; third, it helps to repair their mood; and finally, they want to achieve a feeling of certainty. For some participants more than one factor was important and equally relevant when they sought reassurance, for example, by making other people responsible one could feel under less threat and consequently less anxious.

Perception of threat and the need for safety

Six participants in each group described how the perception of threat motivates their search for reassurance, where the individual's intention is to actively prevent (or prepare for) the feared catastrophe from happening. This was for example illustrated by **Participant 17** and **Participant 16** who both suffer from health anxiety:

Participant 17: "It's just to take away that anxiety or to prove that you're not going to die or that I don't have a fatal terminal illness. Just to try and take away those fears."

Participant 16: "...it's such a massive question. Why do I think I seek reassurance?... Erm..., because I actually again believe there is something wrong with me. I don't, I don't ...erm... Yeah just the physical side of it is so intense that there has to be something wrong with me."

Similarly, a majority (six out of ten) of the OCD sample highlighted how one of the main functions of reassurance was to prevent harm:

Participant 8: *"...to make sure nothing bad happens or nothing is lost that I value."*

Participant 19: *"So I know that nothing would happen to the house. Burn down, for example. That's the biggest fear really."* **Interviewer:** *"What were you hoping to achieve?"* **Participant 19:** *"To make sure it was safe."*

Mood repair

Interestingly, a higher proportion of participants in the HA group indicated that 'mood repair' was a motivational factor. In other words, five out of ten health anxious participants stated that the main function of reassurance was to change their emotional state.

Participant 20 (HA): *"Basically, just to feel better. Just to alleviate tension, anxiety."*

Participant 13 (HA): *"...Erm..., I think as I said just to calm me down."*

In comparison, only two OCD group participants talked about intending to feel better or calmer when they sought reassurance:

Participant 7: *"I would say to feel more comfortable, to feel calmer. They're the two main reasons."*

Participant 9: *"...Erm... to feel better and to feel like it is actually not me and it is the illness, and almost feel normal."*

Dispersion of responsibility

Seven OCD patients out of ten talked about aiming to disperse feelings of responsibility for harm when seeking reassurance. That is, they would make sure other people knew about what they feared might happen (or had happened in the past), and that they would not be to blame in case something bad happened. For example, **Participant 10**, who spent many of her waking hours checking tabs, doors and the cooker, said:

"[I seek reassurance] to avoid responsibility if something goes wrong."

The dispersion of responsibility took other forms as well, for example, one OCD patient (**Participant 6**) described reassurance as a way of avoiding other people from saying 'oh I can't believe you've done that':

Interviewer: *"Why do you think you seek reassurance?"* **Participant 6:** *"To share responsibility, to seek an alternative opinion, viewpoint, perspective. To alleviate fear, and to I suppose part of it is to see whether they judge you, and whether you reveal that verbally. Whether it's a 'oh I can't believe you think that' or 'I can't believe you've done that.'"*

By contrast, only two health anxious patients specifically talked about the dispersion of responsibility. As expected, this focused on making sure other people knew about their potential health problems so they could intervene in case something bad happened.

Participant 14: *"So I seek reassurance that if there is something wrong with me someone will know what to do. So that's the feeling less responsible part, so I'm not the only one that's responsible for what's happened to me." ... "Again it comes back as a responsibility thing so if something would happen to me he would be able to tell a doctor 'oh she said this today' or 'she felt this way earlier' you know."*

Participant 19: *"To make myself feel better and to make other people aware of something that could be wrong with me so if that develops they'd know what to do."*

The need for certainty

Interestingly, many participants (five from the health anxious group and nine OCD group participants) reported knowing usually beforehand how the 'reassurer' would answer them. When asked why they still felt compelled to ask, a high proportion (six out of nine) from the OCD group indicated that they experienced doubts - driven by obsessional thoughts - thus reassurance was sought with the intention to achieve a feeling of certainty. This was for example illustrated by **Participant 3** (where the dispersion of responsibility is also evident):

"Because I need to hear it. Because I don't trust myself. Because I might have it wrong and I kind of don't trust my own opinion always yet. So I suppose- Yeah I think that's it. That I just don't know, I still want to be told by someone else who knows better than me."

By contrast, the need for certainty seemed to play a less significant role in the health anxious group as it was only vaguely mentioned by two participants and appeared to have a different function. For example, **Participant 14** said:

"...it's like a comfort blanket I suppose. And also if I was to approach a person knowing what they were going to say and they were to say something different, that's a flag for me. So if I was to go to my husband and say I have this particular sensation, this is how I feel right now, and he wasn't to give me logical advice, if he was to say to me hmm, well maybe we should see about that, it would set off alarm bells in my head. So the consistency of their response I think makes me feel better."

REASSURANCE AS AN INTERACTIVE PROCESS

This overarching theme is meant to reflect what happens during the whole process of reassurance seeking and giving. That is, it reflects what takes place while reassurance is being communicated to the sufferer and what he finds important during the process and what he or she does with the information. For example, participants said that there was an ideal way to reassure them. Consequently, they tried to adapt their reassurance seeking to make sure this criterion was fulfilled. For example, the HA patients felt that an ideal reassurance came from the mouth of a medical professional, while the OCD patients were more focused on more subtle features, such as how confident did the person look while giving the reassurance and put much less effort into seeking reassurance from 'experts of their concern'. In addition, participants described

attentional factors, where some of them would pay careful attention during the whole process and, for example, listen very carefully to what was being said to them, almost scrutinizing every word.

There is an ideal way to reassure me

A high proportion of participants in each group (six HA and seven OCD) reported that in their mind there did exist an ideal way to reassure them. For three health anxious group participants the 'ideal' reassurance involved experts, such as medical professionals, where detailed discussions about their symptoms took place and/or thorough medical examinations were performed, as illustrated by **Participant 19**:

"I want scans done and blood tests and want all that lot done, because I want them to tell me that I'm actually really healthy, and that I'm fine."

For the remaining three HA group participants, 'ideal reassurance' was more focused on how the other person (this could include experts) conveyed the reassurance, as opposed to requiring specifically a person with expertise in their problem. Ideally, they wanted the other person to show that they had listened to their concerns and thought about them, and then provide them reassurance in a confident manner by for example giving clear reasons or evidence for why there was no need for them to worry. This was for example highlighted by **Participant 14**, who said:

"...don't be too sympathetic because if you're sympathetic that makes me think there's something wrong. Like if my husband was to look at me with a concerned face whenever I'm feeling stressed out that would make me freak out even more. So he's very much straight down the line, rational, this is how you felt before, it's never killed you before, and this is how you're going to get through it, this is what we're going to do. He gives me an action plan that I can work through."

In contrast to the health anxious sample, none of the OCD patients linked 'ideal reassurance' to experts. Furthermore, some OCD patients felt it was unhelpful to be given a rationale for why they should not worry, as illustrated by **Participant 10**, who said:

"It's not to try and get me to understand the logic at that particular time because I'm not in a logical frame of mind so that's probably the worst thing that people can do. It's just to be calm and basically say 'yes it's done, yes it's done, yes it's done' and that's all I want."

However, some similarities were identified between the two clinical groups. For instance, one OCD participant felt it was important for her partner to look confident when providing the reassurance. Another OCD participant said that she wanted the other person to respond calmly, while others wanted to feel they were taken seriously and carefully listened too and/or given well

constructed arguments to disprove their fears. Some of this was highlighted by Participant 5 who said:

"I don't just want them to say it's fine, you don't need to do it, I want to feel they've listened and they've understood properly what I've said. And then they say it's okay. I don't want them to just say 'Yeah it's fine' and they're not actually listening. I want to know they have actually heard what I've said."

The importance of detail

There were some clear differences between the groups in terms of how attentive they were while reassurance was being provided. Both groups reported listening to what was being said, but the OCD group participants reported listening more 'carefully' and also paying attention to *how* the person said it. For example, they would look intently at the other person, read their body language and facial expressions, making sure to memorize what was being said (e.g. take notes) and sometimes repeat out loud what was being said to them or run things past the 'reassurer' again to see if they got the same answer. For example, **Participant 10** said:

"I listen very carefully yeah I do. I listen very carefully but I'm usually- Yeah and usually I'm looking at them quite intently as well, just to try and get a genuine idea that they're telling me the truth. ... I stare a lot at whatever the object is that I'm trying to turn off or ...erm..., it's kind of- I kind of try and show them. So for example, if I unplug the toaster I will kind of wave the plug in his face something like 'look, it's off, it's off, it's off, is it off' so I kind of have to touch the objects. Show them I've done it."

By contrast it was noticed that the health anxious group participants typically described primarily listening to what was being said to them and caring less about other details (e.g. tone of voice, facial expressions etc.). However, two HA participants did mention that they reacted differently to doctor's reassurance (as opposed to their partner's), where they would look a bit closer with the intention to see if the doctor was telling them the truth, as illustrated by **Participant 17**, who explained:

"...if it was a doctor I'd probably read their face very carefully, trying to look for cracks. But otherwise I wouldn't have said so, no."

Interestingly, the HA patients were more likely than the OCD group participants to describe dismissing immediately or not paying attention to what was being said to them during the process. This was for example illustrated by **Participant 19**, who said:

"I listen to some extent, but not completely. I will probably, it's almost like I'll listen to myself more than anything, even if they're talking, I'll be like, if it's not the answers that I want I'll be like 'That's it, you're not giving me the right answers, you're not ever going to give me the right answers'."

THE IMPORTANCE OF HAVING IT

In support of the importance of perception of threat as a motivating factor in ERS, the interview transcripts revealed a linkage between the act of seeking reassurance and the participant's threat-relevant cognitions. In other words, reassurance is sought to prevent (or prepare for) bad things from happening. This linkage was evident across all interviews in both groups.

Fears materialize

A core factor involved in ERS is the perception of threat which drives/motivates the person to seek reassurance with the intention to prevent the feared catastrophe from materializing or prepare for its consequences. As the following examples highlight, reassurance is for some people a matter of life and death; where not being able to access it can have severe consequences, i.e. their worst fears become true. This was highlighted in nineteen interviews out of twenty when participants were asked to bring to mind a particularly distressing example of when they sought reassurance and were then asked: "What was the worst thing that could have happened if you were unable to seek reassurance in that situation?"; **Participant 4** and **Participant 9**, who both suffer from OCD, said:

Participant 4: *"The crisis, the internal crisis would've just gone on and on and I would've completely convinced myself of the fact that I was guilty, and then I'd have another fear and that fear would be 'Okay I have now got to go and talk to the parents and tell them' because the thing is these parents trusted me and there I am many, many years ago with their child and I'm somebody who has got OCD and has intrusive thoughts and just think 'God, these people trusted me' and then my big thing would be that I wouldn't be able to allay the fear, that I would feel compelled to tell them."*

Participant 9: *"...if I didn't seek it I would think that my thoughts would happen. That I would act on it and that I would do what my thought was telling me to do."*

In contrast to the OCD group, the most common fear reported by the health anxious group was focused on dying.

Participant 11: *"Obviously dying is the worst thing I could imagine actually."*

Participant 19: *"Yeah, I'd just suffer, be suffering the horrible death."*

Feeling much worse and unable to cope

As expected all participants reported feeling much worse off emotionally when they were unable to seek reassurance in situations where they felt it was important. Overall, the HA group

participants most commonly reported feeling more anxious or ‘panicky’ and one health anxious participant described feeling completely hopeless without it. For example, **Participant 20** who suffers from HA said:

“[when I cannot seek reassurance I] go to pieces normally, and I think, I just give up. I just give up feeling like it, which seems like a really strange thing but I just sort of think, I just kind of go ‘Well, you know, what happens happens, fuck it’ as they say. And that can be as helpful. Just giving up. Just saying ‘Do it. Do what you want. Take me away. That’s it’.”

In contrast to the health anxious group, the OCD group participants seemed to describe a somewhat different reaction under these circumstances. One participant described how she would start self-harming while others talked about not only feeling more anxious but also angry, frustrated, abandoned and fed up, as illustrated by the following participants:

Participant 6: *“Down-trodden, upset, anxious, maybe more anxious, fed up, frustrated, angry.”*

Participant 10: *“I feel really, really angry. I feel completely abandoned.”*

Some interesting findings were reported when participants were asked “what they did when they were unable to get the reassurance they wanted?”. A majority (seven out of ten) of the HA participants reported ensuring they would get it by either begging the person for it until he or she gave in or try to approach other people (e.g. doctors) for the reassurance. Furthermore, five HA participants (compared to only one participant in the OCD group) mentioned going on the Internet or engaging in self-reassurance under such circumstances. This typically did not help as illustrated by **Participant 14:**

“I tend to just keep searching until I find someone to get reassurance from or I’ll self-reassure by looking on the Internet or trying to talk myself down but that’s like telling someone who’s suicidal to talk someone who’s suicidal off a bridge, you know it’s very hard, so it takes much, much longer for me to calm down.”

Similarly, the OCD group members described having difficulties in managing situations where they were unable to get the reassurance they wanted. One participant said that this could potentially trigger self-harming behaviours (in the form of cutting), whereas others described how they would try to ask for reassurance again either from the same person or approach other people. Two OCD group participants talked about feeling unable to carry on until they got reassurance, as illustrated by Participant 4 and 5:

Participant 4: *"I'm in a stupor, I'm going around examining, going over the incident in my head, examining it over and over and over again."*

Participant 5: *"I'm just waiting for the reassurance. That's all I can think about."*

One OCD group participant, who suffered from checking compulsions, described how she would try to make lists to 'confirm' her checking when reassurance was not available. This was usually counterproductive as the following quote illustrates:

Participant 8: *"... I would create a list that I can tick off. Is that off? Yeah. Plugs; tick. TV; tick. Oven; tick. So it's a proper thorough checklist and that's how I used to deal with it when I lived on my own. ... it worked for a while, and then I started seeing illusions. It was as if my brain was saying 'what if, what if'. You might've ticked everything- You see I know what's happening but I can't control it. It's as if my brain said right you've ticked everything off but I'm going to make you see some smoke now just to make you a bit doubtful."*

It is of note how few participants described dealing with these circumstances, i.e. not being able to get reassurance, in a more helpful way, such as letting the anxiety subside, not interacting with the thoughts, or distracting themselves from the worry by engaging in other tasks. In fact, a (non-pathological) reaction similar to this was only mentioned by one participant from the HA group and two from the OCD group.

It can help

Not surprisingly, participants in both groups reported experiencing typical emotional reactions of anxiety and fear before seeking reassurance:

Participant 12 (HA): *"I feel very anxious, I think I'm going to die, I've got that fear element."*

Participant 6 (OCD): *"[I feel] very anxious, uptight, tense, concerned, worried, stressed."*

The effects of getting reassurance tended to vary between the HA patients; with less than half of them reporting feeling any better, and none of them described feeling rid of anxiety or fear as a result of receiving reassurance.

The contrast with participants with OCD was interesting - all participants from the OCD group reported feeling (typically) better after receiving reassurance. This included feeling less anxious (Ppt. 10, Ppt. 3); relieved (Ppt. 4); calmer (Ppt. 5, Ppt. 6, Ppt. 7); or less responsible (Ppt. 8) as an example. Three participants found reassurance to be particularly helpful and described feeling extremely relieved and able to move on after receiving it, as illustrated by **Participant 6**, who said:

“Overwhelmed with relief, lighter, like I’ve had weight taken off my shoulder, happier, yeah less stressed, less concerned. I actually feel a considerable, almost like a different person in a way. I feel quite aware that people think I’m a bit sort of annoying or I worry that someone might think less of me because it’s not something I want to do, but it’s something I feel I need to. But the reassurance, the feeling I get is much more powerful. It overwhelms that feeling of actually particularly caring that much about what people think.”

RELUCTANCE TO SEEK REASSURANCE

Participants in both groups understood, either from other people (e.g. their therapists, doctors) or their own experience had taught them, that reassurance seeking comes with a cost. That is, it typically offered no more than a short-term relief and could potentially make them feel worse or more anxious and/or trigger other worries and lead to more long-term problems (e.g. make them reliant on other people, maintain their emotional problem).

Counterproductive emotional and behavioural effects of seeking reassurance

Five health anxious group participants mentioned that asking for reassurance could make them feel worse because it might either trigger new things to worry about or because the other person might respond differently to how they wanted. For example, **Participant 19**, said:

“...if I’m seeking reassurance and it doesn’t go the right way that I want it to then that can be negative because it just makes me feel worse and the sensations in my body get worse and the panic gets worse as well.”

Two health anxious participants described the disadvantages as over-reliance on other people or uncontrollable habit (as opposed to a real need). For example, **Participant 16**, said:

“The fact that I’m over-reliant on it. I think the fact that I get so much- I find it such a positive thing is kind of its downfall as well. So the initial response of wanting to get reassurance I don’t have any negative, I kind of find it such a positive thing that I can’t do without it so in a way that’s negative.”

Another health anxious participant mentioned how time consuming it was for him to constantly seek reassurance interfering with his work and everyday tasks:

Participant 13: *“...it takes a lot of time. Yeah so that’s a disadvantage. You don’t ...erm... My work and everything stops. Everything stops. And then of course I will analyse what they’ve said and if it’s good enough or not.”*

Whereas the following participant felt that reassurance not only made him feel worse emotionally but also helped to strengthen his illness beliefs:

Participant 20: *“...it fuelled the problem because the more I did it the more I’d almost try and prove what people were saying was wrong by further researching it and in arguing about it you just heighten your levels of tension and you almost find yourself trying to convince yourself that there is something wrong. And that’s only going to go one way, you’re only going to make yourself worse.”*

Although the OCD group participants reported typically feeling better after receiving reassurance (particularly in the short-term) they also described counter-productive effects - similar to those identified by the HA patients. That is, reassurance seeking had the potential of making them more fearful and anxious (e.g., Ppt. 2, Ppt. 7); it could fuel their OCD and keep it going (e.g. Ppt. 8 and Ppt. 6); and some described it as impossible to control once started (e.g. Ppt. 1 and Ppt. 6).

Interestingly, the OCD group participants appeared to identify much broader counterproductive effects in comparison with the health anxious patients. This may reflect the ego-dystonic nature of OCD. For example, two participants reported feeling guilty after receiving reassurance as illustrated by **Participant 10**, who said:

“I also feel a bit guilty because I do it so often I don’t like having to ask for people’s time to do it.”

In addition, three OCD patients frequently experienced shame or embarrassment because by seeking reassurance they had shared their thoughts with other people who might then judge them:

Participant 1: *“Once it starts it’s very difficult to stop so it’s erm... It’s like once it starts it snowballs, it gets bigger and bigger and bigger. It’s... embarrassing. I’m embarrassed when I’m doing it, and I’m aware that I’m doing it and I feel embarrassed. So I’m worrying about how I’m coming across...”*

The same doubts quickly return

No differences were identified between the groups in terms of for how long the reassurance seemed to last. Overall, participants felt that reassurance worked only for a short time. For some participants this ‘short time’ effect meant few hours, while for others it was literally few seconds or minutes, as illustrated by the following two participants:

Participant 1 (OCD): “...it just wells back up in you. So kind of an immediate sense of relief and then it’s like getting grabbed in the guts again and it just comes back...”

Participant 18 (HA): “I mean the initial ‘oh thank goodness’ you know, and then you know very often as soon as I’ve come out of the consulting room I think ‘oh I should’ve asked him about this’ or ‘I should’ve asked him about that, oh I’m going to have to make another appointment and I have to ask about that’ and of course that’s gone onto the next thing.”

Leaving aside time differences, what was clearly evident from the transcripts was that participants seem incapable of using old reassurance to their advantage and develop ways of managing similar situations on their own.

INTERPERSONAL EFFECTS

This overarching theme reflects the interpersonal effects of ERS including the sufferer’s perceived negative and (potential) positive effects on his or her relationship with the ‘reassurer’.

Participants talked about how ERS could trigger feelings of frustration and anger both in themselves and other people. Unexpectedly, some participants reported that besides the negative effects, they also felt that reassurance could bring people closer together; make their relationships stronger.

It strains other people but can bring us closer

Participants in both groups had mixed views on whether reassurance seeking put strain on their relationships with other people, particularly when asked to consider their perceived short-term versus negative effects of the behaviour. Interestingly, three participants from the HA group did not report reassurance seeking to have any negative impact on their relationships (both short-term and long-term). However, the remaining seven health anxious participants agreed that their reassurance seeking caused other people problems in the *short-term* by increasing their feelings of stress (Ppt. 14), strain (Ppt. 15, Ppt. 16, Ppt. 17), frustration (Ppt. 18, Ppt. 20), or tension (Ppt. 19). Interestingly, only three out of those seven participants felt that reassurance seeking *also* caused *long-term* problems. For example, **Participant 14**, who had earlier described negative short-term effects resulting from ERS, said that it also had negative long-term consequences for her relationship with her partner:

“In the long-term I think he thinks that he’s becoming less of a partner and more of a carer, you know. It’s kind of like his happy lovely wife that he married who was carefree has disappeared almost, you know.”

By contrast, the remaining four health anxious patients felt that reassurance seeking could in the *long-term* help to strengthen their relationships and made them feel ‘closer’ to the other person, as illustrated by **Participant 20**:

"...I think as a whole sort of thing, that the experience of me doing that and her being right when she has provided me with the reassurance that I need, I think that has probably, it certainly made me trust her more, not that I didn't trust her anyway but you know when she gives me advice I've learned to listen. It sort of helped, it just, the whole bloody thing has made me a better person. Definitely."

When the OCD participants were probed about the same issue, only four of them felt it had both a short- and long-term negative impact on their relationships with other people:

Participant 10: *"It has a really bad impact because it's just, it's frustrating for both of you, and I feel guilty about asking for it, and I feel weak for asking for it, and they feel frustrated for giving, and they know they're not helping me really in the long run."*

Interviewer: *"And the long-term? Can you expand on that?"* **Participant 10:** *I think it's just making the OCD stronger and it's also kind of becoming more habitual in our relationship so it's kind of me, my partner and OCD, when it should just be me and OCD, and me dealing with it."*

The remaining six participants had a different story to tell. Although most of them did recognize some negative impact from reassurance seeking (either short-term or long-term), simultaneously they reported (similar to the HA patients) that reassurance seeking could, for example, help them to feel better understood (Ppt. 5, Ppt. 6) or closer to the other person (Ppt. 2, Ppt. 7). As an example, **Participant 9**, who felt that long-term effects of reassurance seeking were feelings of vulnerability and increased anxiety reported the opposite with regards to the impact of reassurance on her relationships with other people in the short-term, as the following excerpt illustrates:

"[In the long-term] You feel a lot closer to them. So you feel like you could tell them anything."

Participant 7 (OCD) felt that reassurance brought her closer to her partner both in the short-term and long-term:

"I think it makes me feel closer to them, that I can rely on them. And that they're there for me in the short-term." **Interviewer:** *"And the long-term? Can you expand on that?"* **Participant 7:** *"I think in the long-term, to use the example of X I think we've formed quite a close friendship because of that, that we know we can talk to each other, so I think if anything it strengthened our relationship but I think that might come from the fact that he does understand."*

Frustration

Although most participants reported that others usually responded positively to their reassurance seeking, i.e. gave them what they wanted, simultaneously a high proportion of them (more than five in each group) felt that they were at the same time frustrating other people by their

reassurance seeking. A key factor for triggering frustration seems to be related to the 'persistent' and/or 'repetitive' nature of reassurance seeking. The following HA group participant said:

Participant 15: *"I suppose my partner can be a little, if it's happened a lot, then he might get a little frustrated because what he's saying I'm not necessarily listening to."*

Similarly **Participant 5**, who suffers from OCD, said:

Participant 5: *"[X] gets frustrated with me. I think other people kind of tolerate it. They don't like it but they tolerate it."*

Section III – Support Seeking

The main finding from the analysis on support seeking is that seven out of ten HA participants and one participant from the OCD group had no experience of support seeking (SS) within the context of their emotional problem – seeking reassurance was their 'default' interpersonal response. Consequently, the interview section that focused on SS had to be discontinued for these eight participants. This striking difference between the groups was unexpected but also very interesting. Fisher's exact test was performed which revealed that the difference between the groups was statistically significant ($p = .0198$, two tailed). As a result the data analysis on support seeking (the second part of the interview) was performed separately for each group (the HA group consisted of three participants and the OCD groups consisted of nine participants).

Although data analysis was performed for both groups the following section focuses mainly on presenting the results for the OCD group given the low numbers of participants from the HA group that reported engaging in support seeking. However, a summary of the main findings for the HA group is provided. The full analysis for the HA group, including a detailed description of overarching themes and subthemes as well as thematic map can be found in Appendix D.

Support Seeking Within the Context of Health Anxiety – Summary of Main Findings

The three health anxious participants described support seeking as an act of approaching others for advice or comfort when they felt bad. Typically, this is something they engaged in very infrequently. They reported seeking support quite openly, as opposed to hiding it, and engaged in the behaviour in a non-compulsive way. That is, they did not feel driven to seek support (like they did with reassurance). Although the participants could describe and define support seeking separately from excessive reassurance seeking there were lots of inconsistencies that emerged during the interviews. For example, in many instances they reported being driven by the same motivational factors when they seek support and reassurance. The HA participants typically found support seeking an helpful interaction, which typically involved them listening to what other

people said to them in a non-obsessive way or seeking expression of affection. None of the participants felt that support seeking caused any interpersonal problems and overall it seemed to be a very helpful intervention when they felt distressed. Although it seems to be helpful, the participants very infrequently engaged in this behaviour - mostly because its positive effects were considered much less in comparison with the seeking and provision of reassurance.

The seven participants that reported not seeking support were asked further about this. Overall, it seemed that their main interpersonal reaction to health fears was to seek reassurance from their caregivers and/or medical professionals and other people tended to provide them with it when requested. Interestingly, five out of those seven found it hard to differentiate support seeking from reassurance seeking – to them reassurance was a form of support. The remaining two participants seemed to distinguish the two concepts in a sensible way, but nevertheless reported not engaging in the behaviour. Further discussion revealed that these seven participants felt that reassurance provided them almost an instant relief and in their opinion the provision of support was unlikely to do so. It should be noted that the ‘absence of support seeking’ remained even after the researcher shared with the participants his definition of the concept and provided examples of support seeking. This suggests that this finding is not a result of conceptual disagreement between the researcher and the study participants.

Support Seeking Within the Context of OCD

Fourteen subthemes were identified which were aggregated into five overarching themes. They are summarized in Table 4.

Table 4. Themes and subthemes identified for support seeking – OCD group

Overarching theme:	TOPOGRAPHY OF SUPPORT SEEKING
Subthemes:	<ul style="list-style-type: none">- <i>The act of approaching others for encouragement to cope with my OCD or comfort when I feel bad</i>- <i>Triggers</i>- <i>It is non-compulsive</i>- <i>It is infrequent</i>- <i>Verbal and non-verbal form</i>
Overarching theme:	MOTIVATIONAL FACTORS
Subthemes:	<ul style="list-style-type: none">- <i>Seeking help to cope with distress</i>- <i>Mood repair</i>
Overarching theme:	SUPPORT AS AN INTERACTIVE PROCESS
Subthemes:	<ul style="list-style-type: none">- <i>Simply listening to what people are saying</i>- <i>Seeking expressions of affection</i>
Overarching theme:	HELPFULNESS OF SUPPORT
Subthemes:	<ul style="list-style-type: none">- <i>It makes me feel better</i>- <i>It has a lasting effect</i>
Overarching theme:	INTERPERSONAL EFFECTS
Subthemes:	<ul style="list-style-type: none">- <i>It is appropriate</i>- <i>It strengthens the relationship</i>- <i>It does not cause upset</i>

*Note: Overarching themes are written in capital letters and **bold** and the subthemes are written in italic.*

Thematic Map of Support Seeking within the context of OCD

The thematic map of support seeking within the context of OCD is depicted in Figure 5. The five overarching themes that were identified are presented in black rectangular shapes and the fourteen subthemes are presented in white rounded rectangular shapes. The OCD participants defined SS as an act of approaching others for encouragement to cope with their OCD or comfort when they felt bad. They described SS as a behaviour which they infrequently engaged in, and they also found it to be non-compulsive, i.e. seeking support is not something they felt they had to do. Interestingly, the participants associated SS with low mood, i.e. negative feelings such as hopelessness, feeling down or depressed commonly triggered SS as opposed to, for example, feelings of anxiety. In terms of motivational factors, i.e. what the OCD participants were aiming to achieve when they engaged in SS, they reported wanting to repair their mood or to get help to cope with their distress. The process of seeking and receiving support, or more specifically what takes place during this process, is much different when compared to reassurance. This was evident in how participants described simply listening to what was being said to them and wanting the other person to express some affection, as opposed to listening ‘carefully’ to what and how (e.g. read people’s faces) things were communicated as we saw for reassurance. Based on their reports, SS seems to be a helpful approach (with lasting effect) when people consider themselves in danger or feel distressed. For example, overall participants felt that the provision of support helped them to feel better – gave them something to fight their OCD. In addition, it appears to have good interpersonal effects, suggesting it may strengthen people’s relationships, and people are typically not bothered when asked to provide support and quite happily provide it.

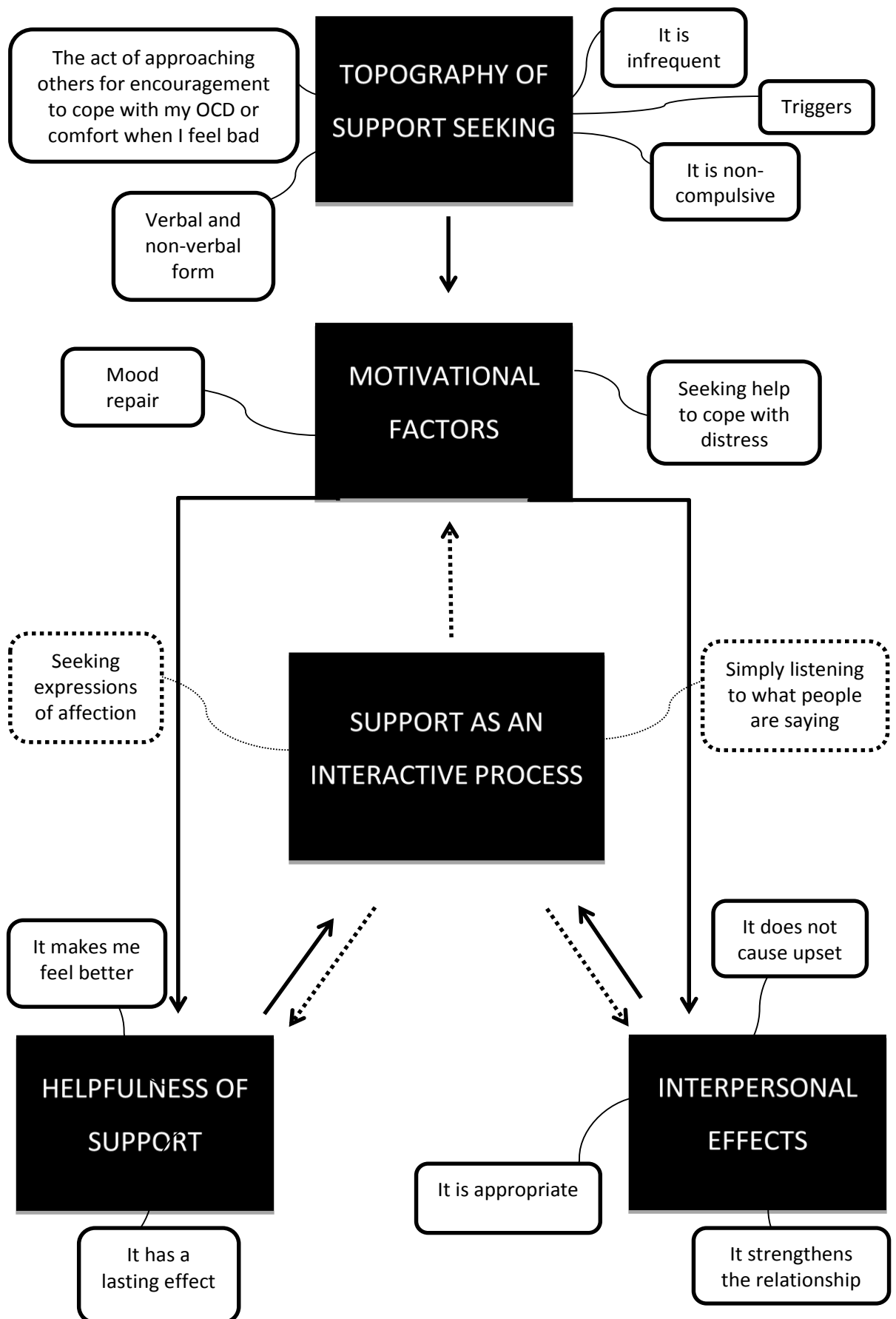


Figure 5. Thematic map of support seeking within the context of OCD

Overarching Themes and Subthemes for Support Seeking Within the Context of OCD

TOPOGRAPHY OF SUPPORT SEEKING

This overarching theme deals with the OCD participants' understanding of SS, i.e. how they define it and what it looks like. In other words, how do they describe the topography of the behaviour? The participants perceived SS to be an act where they approached other people (openly) for encouragement or comfort when they felt bad. In their view, support could both be sought and provided verbally and non-verbally (e.g. with cuddles). They felt that they had good control over the behaviour. They described it as non-compulsive, but interestingly they very seldom engaged in the behaviour (perhaps once or twice a week).

The act of approaching others for encouragement to cope with my OCD or comfort when I feel bad

The OCD group participants defined SS is a behaviour where they approached other people they trusted and shared with them how they felt (e.g. Ppt. 10, Ppt. 4), what they were thinking (e.g. Ppt. 2) or asked for help to fight their OCD (Ppt. 5, Ppt. 6, Ppt. 7, Ppt. 9). For example, **Participant 1** said:

"It's more understanding that somebody is distressed, feeling anxious, and helping them deal with that anxiety and without actually doing anything to support the compulsive behaviour and the compulsive way that they're- whether they're reassurance seeking or asking people to check things, it would be helping them but not indulging the OCD."

Typically the participants reported seeking support mostly from the same people they sought reassurance from, i.e. family members or partners. These people were chosen because they trusted them.

Triggers

Overall, the OCD participants associated SS with low mood. That is, a high proportion (six out of nine) said that "feeling hopeless" (Ppt. 4), feeling "depressed" (Ppt. 9), or "feeling down" (Ppt. 10; Ppt. 7; Ppt. 8) triggered this behaviour. This was for example, illustrated by **Participant 5** who associated SS with feeling depressed or down as well as experiencing intrusive thoughts:

“...it’s normally when I start to feel a bit down, that’s more the time that I want support. ...Or intrusive thoughts. If I’m being bombarded with intrusive thoughts then sometimes I just want to say to somebody I’m not feeling how I should be, kind of thing.”

Interestingly, only one participant (Ppt. 1) said that feelings of anxiety made her want to seek support.

It is non-compulsive

In contrast to reassurance, the OCD participants felt that SS was not a compulsive behaviour that is something they felt they needed to do over and over again and could not resist doing:

Participant 4: *“I don’t feel compelled to seek support. But I do feel compelled to seek reassurance.”*

It is infrequent

Overall, the OCD group participants found it hard to estimate how often they sought support within the context of their OCD. This seems to reflect how infrequently they engage in this behaviour. In most cases participants reported seeking it approximately “once a week” (e.g. Ppt. 7) whereas some participants sought support much less frequently or only “once every few months” (Ppt. 10).

Verbal and non-verbal form

All of the OCD participants described SS as a verbal behaviour, as illustrated by **Participant 9**, who said:

“It’s usually it’s kind of a case of I will just go up to someone and be like ‘I feel absolutely rubbish’. It depends how well they know me and how well they know the situation. It’s usually a case of ‘I’m having a crap day because of the OCD, can you just make me feel better?’”

Support could also be sought and provided non-verbally, for example, through physical affection or simply “being around the person” (Ppt. 10). None of the participants reported using other sources than people for support, i.e. they did not refer to books, the Internet or similar things, when they were probed about this. Participants reported being open about their SS, i.e. they typically did not try to hide it and there was only one OCD participant who gave an example of subtle (or hidden) SS.

MOTIVATIONAL FACTORS

This overarching theme describes the OCD participant's perception of what motivates them to engage in SS, i.e. what are their reasons for seeking support? What are they aiming to achieve? The interview transcripts suggested two main motivational factors: firstly, 'coping with distress or getting encouragement'; and secondly, 'mood repair'. Participants described how they would want help from others to fight their OCD, confront it and overcome their feelings of anxiety. They tried to repair their mood by sharing with other people how they were feeling, or making others aware of how they were feeling with the hope of feeling better themselves. For most participants these two motivational factors worked together, i.e. when provided with encouragement a change in their mood usually followed.

Seeking help to cope with distress

Five participants indicated that they were motivated to get help or encouragement to cope with their distress - fight or resist their OCD - when they sought support. When talking about motivational factors, **Participant 5** said:

"...it can be quite hard trying to do it all on my own. You know, if I'm fighting my OCD every day then it gets quite exhausting and sometimes I just need a bit of a boost. [When I seek support] I'm trying to keep on doing what I'm doing, trying to feel stronger and more confident in what I'm doing."

The following two participants gave good account of the differences between reassurance and support where the latter is not focused on decreasing the perception of threat - it's about dealing with distress itself:

Participant 10: *"I seek support to just generally try and boost my mood and to give me some strength and to give me some hope to keep fighting OCD."*

Participant 1: *"I'm looking for something to help me cope with the OCD rather than actually deal with the thought itself."*

Mood repair

Five participants described wanting to improve their general mood state when they sought support. It is important to note that none of the participants referred to anxiety. In most cases participants simply said they wanted to feel less emotional or simply feel better. It is of note how frequently during the interview participants talked about wanting to feel less "hopeless" (e.g. Ppt. 4; Ppt. 3), less "down" (e.g. Ppt. 9; Ppt. 5) or less "alone" with their problem when seeking support, as illustrated by **Participant 7**:

"I think it's probably, it is a sort of comfort. It's just knowing that you have people to rely on that might be able to help in the situation. Just knowing that you're not alone really."

SUPPORT AS AN INTERACTIVE PROCESS

Support seeking and the provision of support is an interpersonal behaviour. As such, there is an interaction that takes place between the person asking for the support and the person providing it; some information is being exchanged - both verbal and non-verbal. Other hypothesised important factors are how people respond to the support and what they do with the information. We saw earlier how some of the OCD patients have certain criteria that need to be fulfilled for reassurance to work. For example, if the 'reassurer' does not reply with confidence, further reassurance is sought until the correct response is provided (in the correct way). By contrast, the OCD participants' reports about SS suggest that SS does not involve pre-determined criteria which need to be fulfilled. This overarching theme is meant to comprise the OCD participants' attention processes and expressions of affection while support is being sought, provided and responded too.

Simply listening to what people are saying

Six out of nine OCD patients described listening attentively to the other person while support was being communicated. However, the same participants indicated that this was not done in an obsessive way. For example, when **Participant 5** talked about a specific incident and was asked if there was anything specific he did during this process, he said:

"...I was just listening to what he said, just to kind of get comfort from it. ... I am not listening for anything specific."

Seeking expressions of affection

Three participants out of nine said that there was not an ideal way to provide them support. The remaining six participants gave vague answers, but there was some indication that they all wanted to feel understood and listened too. For example, **Participant 1** said she wanted people to show her "patience and understanding" during this process, and **Participant 5** talked about wanting to "feel like I've been listened to and that they care."

HELPFULNESS OF SUPPORT

This overarching theme represents the OCD patients' perceived helpfulness of SS. All participants reported seeking support when they were experiencing negative emotions, such as sadness or hopelessness. The participants felt that the provision of support was a helpful intervention to either counteract those negative feelings or substitute them with some other more positive

emotions. They also, reported that the positive change to their mood had a lasting effect ranging from few hours to few days.

It makes me feel better

When the OCD group participants were asked to describe how they typically felt *before* seeking support, eight out of nine, described negative emotions. This included feeling “hopeless” (Ppt. 2; Ppt. 4); “sad” (Ppt. 5; Ppt. 10); “depressed” (Ppt. 9); “confused” (Ppt. 6) or “anxious” (Ppt. 1; Ppt. 2). All participants reported that being provided support, resulted in a positive change to their emotional state, where the negative feelings were diminished or substituted with some other more positive emotions. Four participants did not refer to a specific feeling (e.g. less anxious) and simply said that the provision of support made them feel better, as illustrated by **Participant 9**:

“Just better. Just generally better. You don’t want to cry so much anymore, ..erm... feel happy – well not happy but you just feel happier than you were.”

Other examples, included feeling “relieved” (Ppt. 2); “relaxed” (Ppt. 3); or “more certain, clearer, more confident, more resilient” (Ppt. 6). It is of note how rarely the participants associated support seeking (and equally the provision or support) with feelings of anxiety. This may suggest that support seeking is not something the OCD participants engage in when feeling acutely anxious.

It has a lasting effect

The timescale for how long the positive effects, which the OCD participants associated with the provision of support, varied between participants. The effect could last few hours, as illustrated by **Participant 5**:

“...it kind of gave me a bit more strength to carry on resisting.” Interviewer: “How long did the positive effects last?” Participant 5: “A few hours.”

For some participants it was measured in days, as illustrated by **Participant 4**:

“Yeah it definitely turned everything off for a while. I just kind of thought ‘Right okay, this is where I’m going, this is what I’m going to do’.” Interviewer: “How long did this positive effect last after receiving the support?” Participant 4: “Probably a few days.”

Importantly, none of the participants described an urge to seek support immediately again after having it provided - they do not seem to get stuck in the vicious cycle of seeking support repeatedly and persistently. For example, **Participant 1** said:

“...I think it [support] has a bigger impact in the sense that with the reassurance the thought comes back very, very quickly. What happened with this is that it gradually faded away. It would come back but not as strong, whereas with the reassurance it would come back stronger.”

INTERPERSONAL EFFECTS

This overarching theme reflects the interpersonal effects which the OCD participants associated with SS. They described it as an appropriate behaviour that other people found normal and were happy to provide. They also felt that the process helped them to feel closer to the other person; their relationships were strengthened and got better both in the short-term and the long-term. They also noted that the process did not cause other people upset, that is others did not respond with frustration or anger. This is in contrast to what tended to happen when they sought reassurance.

It is appropriate

None of the OCD participants felt that it was inappropriate to seek support when feeling distressed, and none of them had ever been told by another person they should not approach other people for support within the context of their emotional problem. However, two participants did mention that they felt at times that they should be able to manage their distress on their own and would thus avoid seeking support from other people. For example, **Participant 1** said:

“I think if it [support] helps you, you should do it. But I’ve got this conflict that I should be able to do it myself because I’ve had it that long.”

It strengthens the relationship

When asked why they thought other people provided support, seven participants out of nine said that they felt it was because the other person cared for them and wanted to help and/or make them feel better. This was for example illustrated by **Participant 5**, who said:

“Because they care. They want to help me get better and this is a healthy way of helping me get better.”

Seven out of nine participants reported that the process of support seeking had a positive impact on their relationship with the person who provided the support, both in the short-term and the long-term. Participants referred to factors such as “feeling closer” (e.g. Ppt.5) to the other person, “more trusting” of him or her (e.g. Ppt. 8) or having a “stronger relationship” (e.g. Ppt. 2). For example, **Participant 10**, talked about feeling closer to his partner in the short-term and more trusting of him in the long-term:

"I think it makes you closer and I think it's, yeah I think it strengthens whatever bond you've got with that person. Interviewer: "And the long-term impact?" Participant 10: "I think you trust them more and I think you just hopefully can kind of know that you can go back to them again if you ever need to go for support."

However, **Participant 9** reported something different. Although she felt that SS had a positive long-term effect in terms of *"building proper relationships"*; in the short-term it carried the risk of making other people perceive her as *"quite a weak person"*.

It does not cause upset

When asked "how other people usually responded to their requests for support", all nine participants said that they typically received a positive reaction. In their experience, the behaviour did not trigger negative emotions, such as 'anger', 'frustration' or 'upset' in the other person. In fact, people showed the opposite and appeared happy to help them. For example, when **Participant 10** was asked the question above, she said:

"Very well, very positively, very lovingly, and want to help and are glad that you've usually come to them for the support."

In addition, participants were asked if they "had noticed any differences in how people reacted to their requests for support versus reassurance". Interestingly, all participants described reassurance as a much more negative interpersonal behaviour. Overall participants talked about how open people were to provide them support when requested, whereas they perceived that they were much less happy to give them reassurance.

Participant 5: *"I think when I get reassurance, it's quite often quite grudgingly. They don't want to do it but they do. Whereas support, they're quite happy to, they're often quite happy to support because it's a positive thing rather than a negative of reassurance."*

In response to this question, three participants specifically mentioned that they felt that reassurance triggered feelings of frustration (in the other person) whereas support seeking would typically not, as illustrated by **Participant 1** who said:

"I think when I'm seeking reassurance, people recognise it. They recognise this repetitive 'Oh we're not going over this again are we?' so I think they get more frustrated. You know 'We've discussed this, do we really need to go over this again?' whereas with support they're less irritated by the repetitive, bizarre questions. I think that's what it is. When you're reassurance seeking, they do 'How many times do we have to discuss this? How many times have you asked me this? You asked me this question three years ago?' So there is a difference. It must just drive them mad."

Also, two participants (Ppt. 10 and Ppt. 4) said that feelings of anger and impatience were triggered when they sought reassurance but not when they sought support. For example,

Participant 4 said:

"...when you seek reassurance there is a slight element of impatience. Impatience and anger. And support, no there's only 'positiveness'."

Section IV – Attitude Scales

The Reassurance Seeking Attitude Scale

Table 5 summarises how the two diagnostic groups (OCD and HA) scored on the Reassurance Seeking Attitude Scale that consists of eight statements thought to be relevant to ERS.

Table 5. Scores on the Reassurance Seeking Attitude Scale – OCD and HA group

		Quest. a	Quest. b	Quest. c	Quest. d	Quest. e	Quest. f	Quest. g	Quest. h
O C D	N	10	10	10	10	10	10	10	10
	Mean	78.0	64.0	79.0	41.0	23.0	60.0	96.0	97.0
	SEM	8.41	11.85	6.74	11.69	8.83	10.22	2.21	2.13
	Median	90.0	75.0	85.0	45.0	10.0	70.0	100.0	100.0
	SD	26.58	37.48	21.32	36.95	27.91	32.32	6.99	6.75
	Range	20-100	0-100	40-100	0-100	0-80	0-100	80-100	80-100
H A	N	10	10	10	10	10	10	10	10
	Mean	34.0	45.0	83.0	41.0	67.0	64.0	89.0	91.0
	SEM	11.27	10.25	7.46	12.42	11.06	9.91	4.33	3.79
	Median	20.0	50.0	95.0	40.0	75.0	80.0	90.0	95.0
	SD	35.65	32.40	23.59	39.29	34.98	31.34	13.70	11.97
	Range	0-90	0-90	30-100	0-100	0-100	10-100	60-100	70-100

In Figure 6, we can see the median score for all the eight questionnaire statements for each group. To examine whether the groups differed from each other, a non-parametric test was used, i.e. the Mann-Whitney U test.

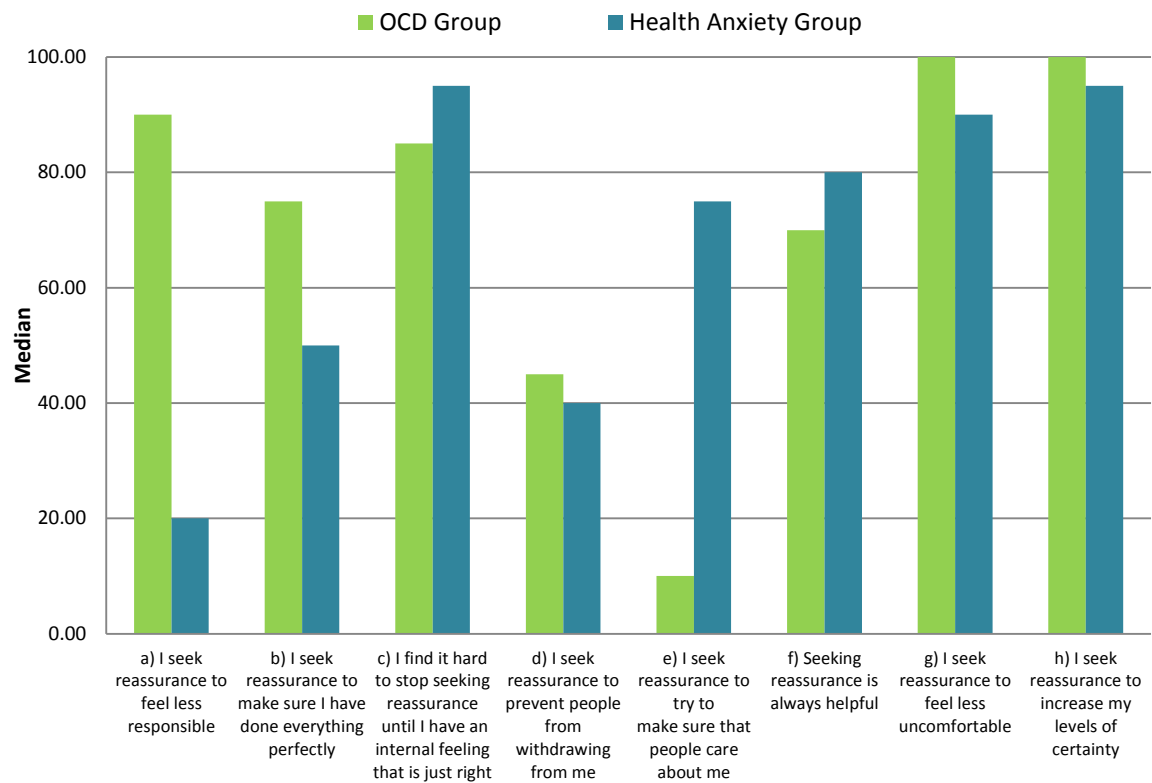


Figure 6. Median scores on the Reassurance Seeking Attitude Scale for the OCD and HA group

The first three items (Questions a, b, and c) were thought to characterise the obsessive nature of ERS. The OCD participants (median = 90; range = 20-100) scored significantly higher than the HA participants (median = 20; range = 0-90) on *Question a: I seek reassurance to feel less responsible*, $U = 14.50$, $p = .005$, $r = -0.605$. This is still significant allowing for multiple testing (Bonferoni-adjusted). For the remaining two OCD items (Question b and c), no significant differences were found using p value of .05. However, for *Question b: 'I seek reassurance to make sure I have done everything perfectly'*, there was a non-significant trend toward a higher score in the OCD (median = 75; range = 0-100) vs. the HA (median = 50; range = 0-90) group, $U = 31.50$, $p = .081$, $r = -.316$.

For the depression items (question d and e), the HA participants (median = 75; range = 0-100) scored significantly higher than the OCD participants (median = 10; range = 0-80) on *Question e: 'I*

seek reassurance to try to make sure that people care about me', $U = 16$, $p = 0.008$, $r = -0.581$. No other significant differences were found between the groups on the remaining questionnaire statements (items f, g, and h) using the Mann-Whitney U test, $p > .05$.

The Support Seeking Attitude Scale – OCD Group

Table 6 summarizes the OCD group's scores the Support Seeking Attitude Scale.

Table 6. Scores on the Support Seeking Attitude Scale for the OCD group

		Quest. a	Quest. b	Quest. c	Quest. d	Quest. e	Quest. f	Quest. g	Quest. h
O C D S S	N*	8	8	8	8	8	8	8	8
	Mean	32.50	33.75	32.50	35.00	60.00	76.25	76.25	51.25
	SEM	11.76	12.81	11.14	12.54	13.23	6.80	6.80	11.87
	Median	20	30	30	35	65	80	80	65
	SD	33.27	36.23	31.51	35.46	37.42	19.27	19.27	33.57
	Range	0-80	0-70	0-70	0-80	0-100	50-100	40-100	0-90

*One participant did not fill in this questionnaire

Reassurance Seeking versus Support Seeking Attitudes – OCD Group

In Figure 7, the OCD group's median scores on both attitude scales have been compared. Since the statements are mirrored, they have been combined into eight statements (as opposed to sixteen). Wilcoxon tests were used to compare the OCD group's ratings on both attitude scales (the Reassurance Seeking Attitude Scale versus the Support Seeking Attitude Scale). Scores for Question a ('I seek reassurance/support to feel less responsible'), were significantly higher for the Reassurance Seeking Attitude Scale than the Support Seeking Attitude Scale, $T = 0$, $p = .008$. Similarly for Question b ('I seek reassurance/support to make sure I have done everything perfectly'), $T = 0$, $p = .031$; Question c ('I find it hard to stop seeking reassurance/support until I have an internal feeling that is just right'), $T = 0$, $p = .008$; Question g ('I seek reassurance/support to feel less uncomfortable'), $T = 3$, $p = .016$; and Question h ('I seek reassurance/support to increase my levels of certainty'), $T = 0$, $p = .008$. No other significant differences ($p < .05$) were reported, but Question e ('I seek reassurance/support to make sure that people care about me') came close to it, $T = 3$, $p = .078$. Given the number of comparisons carried out, only questions a, c and h can be considered likely to be different.

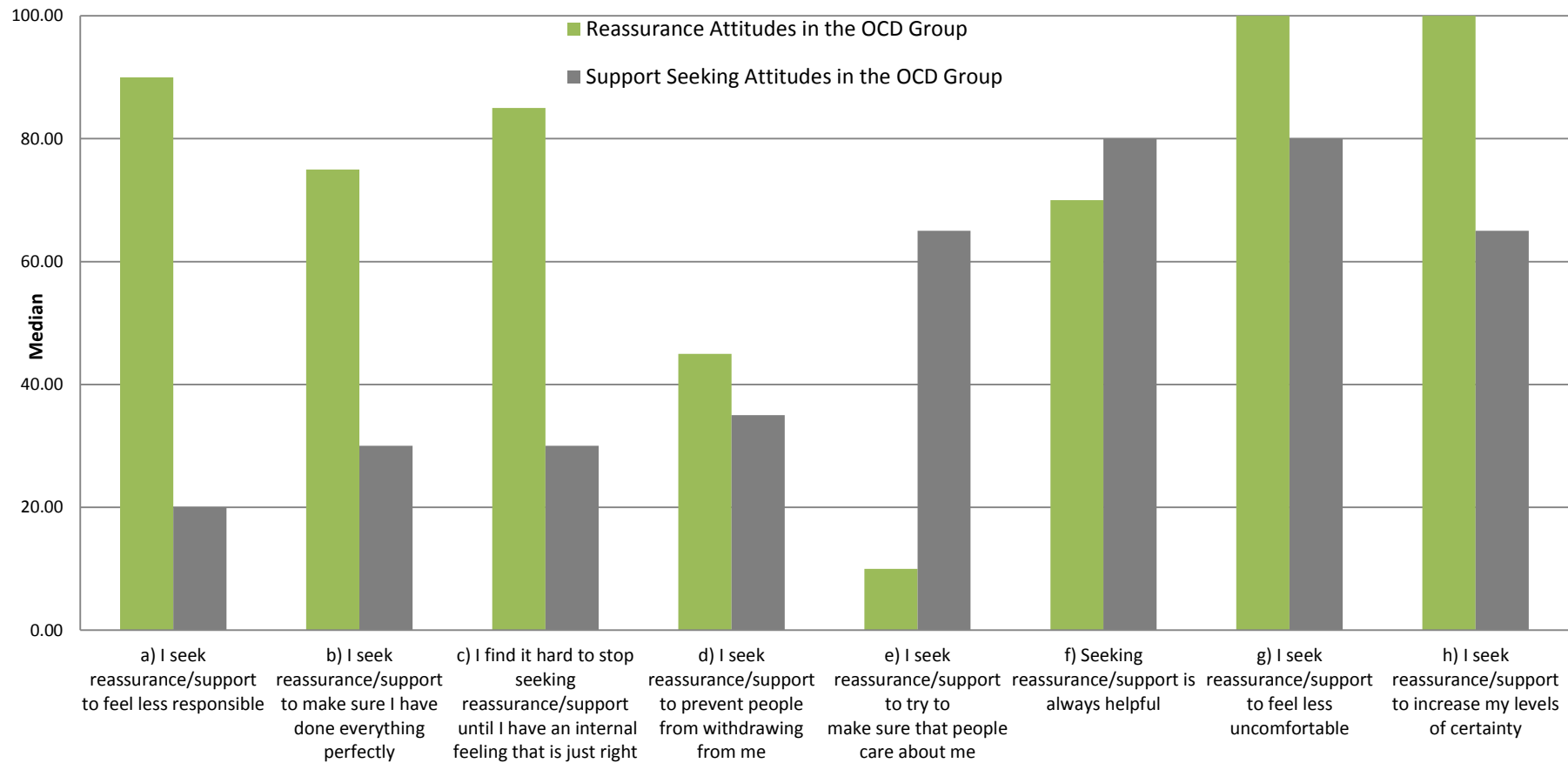


Figure 7. Comparing reassurance seeking and support seeking attitudes - OCD group

Discussion

This study examines differences and similarities between Excessive Reassurance Seeking (ERS) and Support Seeking (SS) within the context of OCD and health anxiety. Reassurance seeking was present in both groups but, in the most obviously striking finding, significantly fewer health anxious participants reported seeking support in comparison with the OCD group participants. The discussion is therefore organized to separately deal with excessive reassurance seeking and support seeking.

Excessive Reassurance Seeking

With regards to ERS specifically, some similarities and differences emerged between the two groups. Results indicate a shared topography of ERS, that is, individuals suffering from OCD or health anxiety described ERS as a reaction to intrusive unwanted thoughts, doubts, images, anxious feelings or bodily sensations which were negatively interpreted. Furthermore, this is a behaviour that is hard to resist, is time consuming, and interferes with people's lives and can take on various presentations (e.g. be direct or hidden). This finding is not surprising and in line with what has been described elsewhere in the OCD and health anxiety literature (e.g., Abramowitz, Franklin, & Cahill, 2003; Kobori et al., 2012; Parrish & Radomsky, 2010; Salkovskis & Warwick, 1986; Warwick & Salkovskis, 1985). Several motivational factors were identified. The results are consistent with what was previously argued that ERS is a reaction to the perception of threat, and the intention of the individual when engaging in ERS is to reduce the perceived threat and/or seek safety. This was evident across all interviews in both groups. This study also offers support for the idea that when individuals with OCD seek reassurance their intention is to disperse or transfer feelings of responsibility onto others, thereby reducing negative feelings such as anxiety.

In anxiety problems there is an overestimation of threat and an underestimation of the capacity to deal with it or its consequences. If threat is the person's reason for seeking reassurance – then it can be conceptualised as a safety-seeking behaviour. If the reason is unrelated to threat then it is not. The role of reassurance seeking is determined by the person's reason to act in such a way, his or her intention by doing what he/she does, the meaning of the behaviour. Given these findings and as argued elsewhere by Salkovskis (1985, 1999) Rachman (2002) and more recently by Parrish and Radomsky (2006), ERS is best conceptualized within the context of OCD as a safety-seeking behaviour, or more specifically a type of checking behaviour. In contrast to OCD, it was expected that the responsibility factors, within the context of health anxiety, would be less broad and specifically focused on the person's health and medical consultations where the individuals intention is to draw the attention of other people to his or her physical state to allow for the

detection of any abnormality. Although this was evident amongst those health anxious participants who endorsed responsibility as a principal factor in ERS, it only emerged in two transcripts out of ten. It is proposed here that the semi-structured interview may have contributed to this finding by not incorporating questions directly intended to identify this difference in specificity.

Other motivational factors were identified. In addition to reducing threat and dispersing/transferring feelings of responsibility, individuals suffering from OCD seem to engage in ERS to achieve a feeling of complete certainty. The author argues that 'the need for certainty' is best understood as being an intolerance of uncertainty driven by the perception of threat; the person believes there is some concern that needs to be resolved – why would there otherwise be a need for certainty? This finding is in line with Kobori et al. (2012) who reported that when OCD patients seek reassurance their focus is on transferring responsibility as well as the achievement of complete certainty that whatever they fear will not take place. This motivational factor seems less relevant for individuals suffering from health anxiety who on the other hand were much more likely to engage in ERS to repair their mood.

In line with findings from the OCD literature (e.g., Kobori et al., 2012) ERS is an interactive process. That is, when OCD or health anxiety sufferers are driven by these motivational factors, they try to make sure their criteria for 'ideal reassurance' is fulfilled. For someone with health anxiety, ideal reassurance can involve medical examination by a doctor, while the individuals suffering from OCD were much less focused on expert opinions. Interestingly, differences emerged between the groups in terms of how attentive they were while reassurance was being provided, i.e. in line with Kobori et al. (2012) findings; individuals with OCD typically seem to become extremely careful and attentive to all details, such as tone of voice, facial expressions, during the process. Although a proportion of the health anxious participants wanted the 'reassurer' to appear confident when providing reassurance, overall they were much less focused on the various details (facial expression etc.) and more likely to dismiss (or not even listen to) the reassurance that was provided to them.

The study clearly suggests how important reassurance seeking is for some people experiencing anxiety problems. To get some idea of the level of importance - not being able to get it meant for all participants, no matter if they were suffering from OCD or health anxiety, that they would feel much worse; would be unable to cope; and most importantly they predicted that their worst fears could come true. A relevant finding comes from Salkovskis and Kobori (in review) questionnaire study where OCD patients were asked about the consequences of not getting reassurance when

they sought it. Findings revealed that although the (positive) effects of reassurance (anxiety reduction) diminish over the medium to longer term they still feel better relative to not having been given any reassurance. The authors argue that their finding suggests that in the absence of treatment it can have harmful effects to patients and their caregivers to withhold reassurance.

It was of note how few participants seemed to be able to successfully deal less pathologically with circumstances where reassurance was not available or withheld. In some cases, participants even reported engaging in self-harming behaviours when reassurance was inaccessible or withheld. Again we are reminded that stopping reassurance seeking is much more complicated than simply telling people to stop seeking it and ban others from providing it. This reliance on reassurance becomes more interesting when we consider the effects of getting reassurance. At best, reassurance is a short-term solution. In fact, half of the health anxiety group participants reported not feeling any better after getting reassurance. This was not the case for the individuals suffering from OCD, who all reported feeling better after getting reassurance, but this effect tended to be short lived and quickly the same doubts returned and further reassurance was needed.

There are other disadvantages to reassurance seeking, which are more centred on interpersonal problems. In line with findings from Study 1, 'frustration' as part of the carer's experience emerged as a theme. That is, both groups understand that their constant requests for reassurance frustrate other people. What is interesting about this finding is that simultaneously, the same participants had mixed views in terms of what impact ERS had on their close relationships in the short- and long-term. Interestingly, many of them felt that ERS could equally bring them closer to the other person – make them feel more understood and strengthen their relationships.

Support Seeking

The most striking finding from this study is of course how few participants from the health anxiety group reported seeking support within the context of their emotional problem whereas the OCD participants reported the opposite. Salkovskis and Warwick (1986) drew a parallel between patients suffering from health anxiety and those with OCD. More precisely, the authors point out that in health anxiety, the intrusive, catastrophic cognitions followed by ERS are typologically similar to the obsessions and compulsions seen in OCD. However, illness fears tend to be *egosyntonic* which means that health anxious patients view their health beliefs as realistic and non-repugnant, i.e. it makes sense to them that physical (or mental) illness is actually present (or will be in the near future). This is in stark contrast to how the literature approaches obsessions in OCD, where *egodystonicity* is often considered to be a fundamental feature (Clark, 2004), and by some viewed as a key distinction factor between obsessions and other cognitive processes such as

worries (e.g., Langlois, Freeston, & Ladouceur, 2000). Egodystonicity usually refers to the inappropriate quality of the obsession, i.e. it is contrary to or inconsistent with what the person considers being his or her core values, ideas, and moral attributes (Clark, 2004). As a result, obsessions tend to become the OCD sufferer's 'dirty little secrets' which are concealed from everyone (Newth & Rachman, 2001). Salkovskis (1985, 1999) cognitive analysis of OCD and other important research and theory (e.g., Freeston & Ladouceur, 1997; Rachman, 1997; Rachman, 1998) suggest that intrusive and inappropriate 'normal' thoughts become problematic when the individual starts treating them as important and that they imply something meaningful about the person. This process then paves the way for the development of OCD. It also means that when it reaches a clinical state the OCD sufferer should be helped to interpret the unnecessary and catastrophic interpretations differently, and consequently the obsession will weaken or even completely disappear, as described elsewhere (Clark, 2004; Salkovskis, 1985, 1999).

Historically, DSM has done a poor job in explaining what contributes to the egodystonicity of an obsessional thought. Bizarrely in its most recent version, i.e. DSM 5, the concept does not even appear within the context of OCD. This may perhaps reflect the difficulties in defining the concept; in fact, Purdon, Cripps, Faull, Joseph, and Rowa (2007) recently called for a coherent definition of the concept which accounts for the complexities inherent in the relationship between a person's thought processes and his or her personality. We know that the themes of obsessions are usually centred around the patient's most sensitive areas in his life, for example, someone who has intrusive thoughts about having sex with children is likely to be extremely caring about children and someone who is plagued with obsessions about sin (scrupulosity) is likely to be religious and so on. Although it is true that many case presentation of OCD clearly show that people's obsessions go against their values, it is perhaps too simple to assume this applies to everyone with OCD. In fact, it is likely that egodystonicity varies across subtypes of OCD and there is even some evidence suggesting that incompleteness experiences in OCD are in fact egosyntonic (Summerfeldt, 2004). Within this context, Purdon et al. (2007) highlighted two very important points that need to be considered. Firstly, a thought can be syntonic with some valued aspect of the self and dystonic with others. For example, patients who suffer from contamination OCD are usually extremely caring people, thus the content of a contamination related obsession (e.g. "I have polluted myself... if I don't wash then I will transmit it to my family and cause them to die") does not automatically contradict the person's values, nor may the idea of the importance of protecting others be experienced as unwanted. Purdon and colleagues argue that it is rather the excessiveness and/or the irrationality of the concern that makes it egodystonic. Furthermore, obsessions may contradict a person's belief system but at the same time be consistent with his or

hers preferences and past behaviour. For example, a paedophile who does not want to be a paedophile may still have thoughts of molesting children (Purdon et al., 2007).

How does this help to explain why so few health anxious participants in this study sought support? The answer to that question is not straightforward, but egosyntonicity may be a key issue. Health anxious people consider their illness fears to be rational, thus they do not try to ignore or suppress these thoughts because it makes sense to them that they have (or will have) health problems. In addition to that, most other people can to some extent relate to health fears and the need for reassurance under such circumstances (Kobori & Salkovskis, 2013; Salkovskis & Warwick, 1986). Consequently, reassurance seeking could become a default interpersonal response to the perception of health threats and the associated distress, as opposed to other responses, including support seeking. In contrast to health anxiety, the egodystonic nature of obsessions calls for a different response to the perception of threat. First of all, most individuals with OCD recognize that their beliefs are definitely or probably not true (or that they may or may not be true). This may suggest that theory B (a non-threatening alternative explanation) is already embedded in how the individual understands his obsessional problem. Thus, seeking support may perhaps automatically become an option. Secondly, caregivers of OCD patients may find the process of reassurance particularly frustrating and do not relate to the sufferer's fears like in health anxiety. Consequently, they may not understand the reasons (or find them bizarre) for why reassurance is sought from them and thus are reluctant to give it (Kobori & Salkovskis, 2013). These two reasons may help in explaining why the participants with OCD were more likely to seek support when compared to the health anxious participants. However, it seems likely that the full answer is much more complicated. Further research is clearly needed.

Quantitative Data

The Reassurance Seeking Attitude Scale

The first three items (Question a, b and c) on the Reassurance Seeking Attitude Scale were specifically designed to characterise the obsessive nature of ERS – consequently it was expected that the OCD group would score higher on these three items. Unexpectedly, that was only true for Question a (*'I seek reassurance to feel less responsible'*) that was worded in line with how responsibility is thought to function within the context of OCD (see page 20); responsibility factors are believed to overlap between these two disorders but with some difference in specificity. Thus, this finding was expected. However, no difference emerged on Question b (*'I seek reassurance to make sure I have done everything perfectly'*). Perfectionism is often considered one of the key cognitive mechanisms in OCD (Obsessive Compulsive Cognitions Working Group, 1997) but to the

author's knowledge perfectionism is typically not associated with health anxiety. This may result from how the question was worded, but it is also important to keep in mind that the groups consist of very few participants meaning that any non-significant findings (from both attitude scales) should be interpreted with caution. Surprisingly and contrary to expectations, the HA participants scored high on Question c (*'I find it hard to stop seeking reassurance until I have an internal feeling that is just right'*); clinically you would mostly anticipate to observe a relationship between compulsive behaviours and 'just right feelings' in OCD patients. However, in his recent theoretical paper on health anxiety, Rachman (2012) mentions that reassurance can have the elusive 'just right' properties that many patients suffering from OCD aim to achieve. This finding calls for further investigation into the relationship between 'just right' feelings and health anxiety.

Question d and Question e, came from the reassurance in depression literature (Coyne, 1976b) and it was expected that scores would be low in both groups and not significantly different. Unexpectedly, participants with HA scored significantly higher on Question e – thus they seem to be more likely to 'seek reassurance to make sure other people care about them' in comparison with the OCD group. For the remaining three questions (Question f, g, and h) it was expected that both groups would score similarly and give high ratings on those items, i.e. they would find reassurance to be helpful (Question e) and that their ERS was driven by anxiety relief (Question g) and wanting to increase their levels of certainty (Question h). This was mostly true, but it was of note that the scores on Question e were not higher, in other words, a lower proportion of participants than expected appeared to find reassurance to be always helpful.

The Support Seeking Attitude Scale

When the OCD group's scores on the Support Seeking Attitude Scale and the Reassurance Seeking Attitude Scale were compared, findings revealed that the OCD group understood reassurance seeking to function differently, i.e. when seeking reassurance they were more likely to be driven to 'decrease their feelings of responsibility', 'wanting to achieve an internal feeling that is just right', and 'increase their levels of certainty' while that was not the case for support seeking. This is in line with how these two interpersonal behaviours are thought to differ in function (see page 19-21).

Diagnostic and Transdiagnostic Factors

Findings from this study suggest that if a person suffering from OCD or health anxiety detects a threat, he or she may decide to engage in excessive reassurance seeking as a way of dealing with the perceived threat. The study shows that ERS has some transdiagnostic components. Findings suggested a shared topography across both groups and the consequences of seeking reassurance,

i.e. interpersonal effects, seem to be shared. In addition, participants in both groups had the same reasons for both wanting reassurance and being reluctant to seek it.

An important question is whether the motivational factors are shared across both disorders. The answer to that question seems to be both 'yes' and 'no', i.e. both groups were driven to seek reassurance to feel safe, but other (secondary) motivational factors were not all shared. This is perhaps best understood as an indication that ERS is transdiagnostic but has also diagnostic specific factors. As an example, when asking for reassurance, the individuals suffering from OCD were not only aiming to reduce the perception of threat but also to transfer some of the responsibility for any danger onto another person (and sometimes also aiming to feel more certain). In contrast, the health anxious groups seemed motivated to repair their mood in addition to reducing threat but less focused on increasing certainty in comparison with the OCD group. Again, this may suggest that some functions of ERS are diagnostic specific while others are transdiagnostic - ERS has different meaning for people suffering from different emotional problems.

Study limitations

This study has several limitations. As with other qualitative research with small samples it can be criticised for its focus on narratives provided by a relatively small sample of patients.

Consequently, an important limitation relates to the generalizability of the findings which were identified. A future study would benefit from a larger sample in addition to recruiting participants from more varied ethnical backgrounds (the current sample was limited to a white population).

Also, recruitment of participants was restricted to NHS services and self-help organisations perhaps suggesting that they may have a different understanding of ERS and support seeking compared to someone who is not actively seeking support or in treatment for their psychological problem. A follow-up study would benefit from recruiting participants more broadly, for example, via hospitals or GP settings (e.g. where health anxious patients frequently attend without necessarily recognizing their problem being of a psychological nature as opposed to physical). It should also be noted that the inclusion criteria required participants to be seeking reassurance excessively whereas they were not included/excluded on the bases of their use of support seeking. This may have resulted in a skewed sample consisting of health anxious people who do not seek support as opposed to being an overarching theme in health anxiety. A future study would benefit from recruiting participants on the basis of reporting engagement in both behaviours. Furthermore, although the qualitative approach may be helpful in improving the understanding of a phenomenon of interest, there is a risk of researcher's bias when the data is

interpreted. Although steps were taken to address this issue (e.g. frequent expert supervision) it did not involve another researcher who independently coded the entire data set to allow for a more thorough comparison. A future study would benefit from incorporating that. Thirdly, the study relied exclusively on participants' self-report to assess their understanding of ERS, how it functioned and other various aspects of ERS and SS, which the researcher aimed to examine. This is a threat to the study's validity since there may be a discrepancy (lack of 'insight') between the participants' narratives and their actual reassurance seeking and support seeking in real life. Similar to what Parrish and Radomsky (2010) did, certain steps were taken to address this issue, by having participants engaging in imagery to enhance their recollection of relevant ERS and SS episodes.

The methodological shortcomings in the study mean that these results should be interpreted with caution. It should also be noted, that the semi-structured interview schedule was quite long; sometimes taking two hours to complete. Although participants were regularly offered to take a break (and encouraged to ask for it if it seemed to the interviewer that it was needed), the length of the interview schedule may have had some effect on how participants reflected on their experiences. Finally, the two attitude scales, i.e. the Support Seeking Attitude Scale and the Reassurance Seeking Attitude Scale, have not been validated. They were specifically developed for the study, as no validated measures of this kind exist. It should also be noted that although the items for the reassurance seeking attitude questionnaire were based on theory and previous research, the support seeking attitude scale was clearly not and only intended to give some indication that participants differentiated between the two concepts.

Clinical implications and future directions

Cognitive behavioural therapy for anxiety problems typically helps the sufferer to identify and change: (i) the main negative interpretations that take place in situations which are associated with the person's anxiety; (ii) attention factors and/or the possibility of reducing or preventing bad things from happening; (iii) safety-seeking behaviours motivated by the perception of threat; (iv) beliefs (typically referred to as assumptions or attitudes) that give rise to misinterpretations of triggering stimuli; (v) circumstances or situations that either confirm or strengthen the negative interpretations and other beliefs (Salkovskis & Forrester, 2002). From the beginning of therapy, the sufferer and the therapist work together to construct and test a new, less threatening explanation of his experiences or an alternative view of his/her problem/s. As previously explained, this is often referred to as 'theory A versus theory B' approach, coined by Salkovskis (1999). To give an example, the therapist might say to the person suffering from health anxiety:

“It seems to me that there are two explanations to test out. Which do you think explains things best: that you are suffering from an undiagnosed brain tumour (theory A) or that you are someone whose values are centred around being healthy, thus you become extremely worried about being sick when you experience physical sensation that do not make sense to you (theory B)”?

As mentioned previously, it is important to note that these two contrasting explanations call for a very different behavioural reaction. If we apply this specifically to excessive reassurance seeking - if theory A were true then such a reaction in the form of approaching doctors for reassurance, makes sense. If, however, theory B were true, that means that the person is suffering from an anxiety problem (not a brain problem) where seeking reassurance excessively is toxic and increases the threat belief. Thus, once the patient has been helped to understand how ERS maintains his/her threat perception, it follows that he or she should be helped to eliminate ERS. Similarly to other safety-seeking behaviours, eliminating ERS is often easier said than done, particularly in complex and severe anxiety problems.

It is reasonable to consider that the substitution of support seeking for reassurance seeking can be desirable. As previously stated, support seeking is here understood as a coping response where the person intends to control his/her anxiety with no further beliefs about the benefits of the response (Salkovskis, 1996a). However, the potential therapeutic gains of support seeking remain mostly unexamined and to the author's knowledge controlled experimental analysis do not exist. The present qualitative analysis offers some insight into how people suffering from OCD and health anxiety understand the concept and how it functions. The fact that the OCD patients, reported beneficial effects from seeking support is encouraging. They clearly understand the differences between SS and ERS and these two interpersonal behaviours are driven by different motivational factors. Based on the present findings, it seems, overall, helpful to seek support (in terms dealing with distress) and this behaviour does not cause interpersonal problems like ERS; if anything it strengthens peoples' relationships. However, amongst those participants who reported seeking support, this is a behaviour they engage in infrequently and typically not when they feel under threat.

Why is it that people suffering from OCD and health anxiety do not seek support more frequently? The author speculates that this is a result of a lack of an alternative explanation; the patient is 'stuck' in theory A mode. The reader is reminded that the one of the fundamental principles of cognitive theory is that people feel and act according to the meaning they attach to the given stimuli/situation (Beck, 1976). Thus when a situation or stimuli is interpreted as

threatening, the logical response to the threat is to seek safety by, for example, engaging in reassurance seeking. That response may be helpful in some instances, for example, when people have developed transient health concerns (the concern is based on actual threat as opposed to perceived threat) but not when people suffer from severe and persistent anxiety, where the problem involves an overestimation of threat and an underestimation of capacity to deal with the threat (Beck et al., 1985). In contrast, support seeking does not logically follow the perception of threat. In fact, it is not until the person suffering from anxiety, starts entertaining the possibility that there exists an alternative, less threatening explanation for his/her experiences – theory B – that engaging in support seeking becomes an option and makes sense to them. Thus our role as therapists is to help patients to make that shift from theory A to theory B.

Chapter 5:

Reassurance in Practitioner-Patient Relationships

Having identified the phenomenology of seeking and giving reassurance in patients and those closest to them, we next turn our attention to the issue of practitioners' understanding of reassurance seeking and how they believe it should be dealt with. There are three related questions addressed in this chapter. Firstly, do therapists believe that excessive reassurance seeking (ERS) is related to a specific disorder, i.e. health anxiety, as outlined in diagnostic manuals such as DSM (American Psychiatric Association, 1994, 2000), or do they consider it to feature across different diagnoses despite it not being diagnostically important? Secondly, does the amount of clinical experience have an effect on how therapists view ERS? Finally, what treatment interventions do therapists, consider an essential part of cognitive behavioural treatment (CBT) when treating (or working with) patients presenting with ERS? In particular, are exposure/response prevention principles still guiding therapists? This final topic falls with the current 'message' in the cognitive and behavioural literature (e.g., Abramowitz et al., 2003; Clark, 2004; Marks, 2005; Rachman, 2002) where it is typically recommended that the provision of reassurance should be avoided. The logical extension from that is that therapists withhold any reassurance giving and strongly encourage patients not to seek it, and their carers not to provide it. This approach originates in behaviour theory and is based on the idea that the transient reductions in feelings of anxiety and the potential relief that may follow the provision of reassurance reinforces the behaviour, and thus any requests for reassurance should be ignored to allow the behaviour to be extinguished by a process of non-reinforcement (Abramowitz et al., 2003; Rachman, 2002; Rachman & Hodgson, 1980). In other words, these procedures are meant to demonstrate to the patient that distress naturally subsides over time, and thus seeking reassurance is not necessary. The value of this approach has been highlighted by influential behaviourists such as Marks (1987) who interestingly compared ERS to alcoholism: "Their repeated requests for reassurance are like an alcoholic waking up with the shakes. A nip of alcohol settles him for a while, but soon the shakes recur, more alcohol is needed, and so the vicious circle continues. Only stopping all alcohol breaks the addiction in the long run. In the same way addiction to reassurance is broken by consistently withholding reassurance" (p. 414). In practice, Marks recommended training relatives of anxious patients to respond with a dully monotonous voice that they will not give reassurance, or say that according to hospital rules they are not allowed to provide reassurance. In case the carer forgot to reply in this manner, the sufferer and the carer were to call the therapist on two phones on the same line to role play the scene again (Marks, 1987; Marks, 2005).

It should be said that simply withholding reassurance makes a lot of sense from an exposure and response prevention standpoint. There are a number of studies and clinical guidelines supporting the use of ERP in, for example, reducing symptoms of OCD (Abramowitz, 1996; Deacon & Abramowitz, 2004; National Institute for Health and Care Excellence, 2005; Rosa-Alcázar, Sánchez-Meca, Gómez-Conesa, & Marín-Martínez, 2008) and health anxiety (Abramowitz & Moore, 2007). However, it is suggested here that there are good reasons to question this blanket consideration that reassurance is a bad thing that should simply be stopped. But why? The author would like to start with reminding the reader about the fact that reassurance seeking is a highly evolved repetitive and usually negotiated interpersonal behaviour, i.e. it is between people, as opposed to, for example, compulsive washing or other checking behaviours which tend to be performed when the person is alone (Rachman, 1976a, 2002). Consequently it is suggested here that it deserves a much better analysis and fine grained approach to intervention. As an example, the findings from the qualitative studies that were presented in chapters 3 and 4, suggest a complex mixture of various factors that are important in terms of understanding how people seek reassurance and what they do with it and so on. Findings also revealed that there is a risk of a strong negative behavioural and emotional response when reassurance is withheld. Thus, a more subtle approach must be more appropriate. One of the problems with the behavioural approach is that it does not take into account the interpersonal factors and is entirely focused on the fact that the patient has sought reassurance rather than trying to weaken the belief that motivates the patient's behaviour - so that the he or she chooses not to engage in the behaviour. Furthermore, experienced therapists may be well equipped and feel competent to deal with the negative reactions, both the behavioural and emotional, which withholding reassurance may elicit, but as was shown in chapter 3, carers are not. In fact, they typically feel that they cannot cope without giving reassurance. For them, withholding it can and does cause more interpersonal problems and in the worst case can trigger aggressive behaviours aimed towards them. Perhaps most importantly, there is also a hidden negative message when therapists tell carers to withhold reassurance; it puts the blame on them as it implies (explicitly or implicitly) that by giving reassurance they have made the patient's emotional problem worse. With this in mind it is argued here that there is a need for a more subtle approach for dealing with excessive reassurance seeking. Before discussing this topic further let us briefly review how reassurance is dealt with in medical settings.

Reassurance in medical settings

One of the most discussed types of reassurance in the literature is reassurance seeking in medical settings. Because patients normally worry about symptoms and fear serious illness, many physicians and general practitioners consider reassurance to be an essential and logical part of consultation and beneficial in terms of decreasing patients' feelings of anxiety (Dowrick et al., 2004; Howard & Wessely, 1996). As an example, reassurance is recommended as an intervention for doctors, intended to reduce fear or lead to fewer health complaints, in a variety of pain problems (Linton, McCracken, & Vlaeyen, 2008). Interestingly, the European guidelines for acute lower back pain even recommend giving patients reassurance that their fears are groundless and that they can expect a rapid recovery (Tulder et al., 2006). Reassurance in medical settings can of course take various forms; anything from a direct verbal reassurance: "Trust me there is nothing wrong with you, now get out of my office", to a careful discussion and examinations of why the person cannot be suffering from the illness he or she fears: "Let's make sure to exclude everything...let me book you in for a full body MRI scan, thorough blood tests and this new test we just started using". From the doctor's perspective the latter is often applied to provide stronger or more convincing reassurance that the person does not have a particular disease.

Warwick and Salkovskis (1985) and Salkovskis and Warwick (1986) argued that there are three associated reasons for why a person decides to seek medical consultation: Firstly, it is the experience of pain, discomfort and inconvenience caused by the symptoms, for example, throat pain makes swallowing food difficult thereby creating real life problems. The second concern relates to the anxiety and intrusive thoughts about the possible cause of the health problem and the meaning that is attached to the symptoms the patient is experiencing. As an example, a person may inaccurately believe that the headache he or she is experiencing is a result of deadly brain cancer, triggering further symptoms that are then interpreted as additional evidence for the health problem, and disproportionate anxiety of the nature of the symptoms. The third concern has to do with discomfort in relation to the possible negative consequences of not taking further action, for example by seeking consultation. It is the latter two processes which have the potential to give rise to persistent and unhelpful reassurance seeking which ultimately leads to the development of a psychological problem.

As pointed out by Warwick (1992) it is surprising how little attention is paid to the concept of reassurance when training doctors, nurses and other medical professionals, given that the provision of reassurance is probably the most common psychotherapeutic technique in medical settings (Howard & Wessely, 1996; Warwick & Salkovskis, 1985). Consequently (and

understandably) there are reasons to believe that many professionals fail to understand the complexity involved in reassurance and thus do not develop the necessary skills to tackle pathological reassurance seeking. Part of the explanation may have to do with confusion in the medical literature about the definition of reassurance, as it is most often viewed as simply providing patients with (repeated) information intended to dismiss their health worries. The European guidelines on back pain, which was referred to here above, are an excellent example of this. More importantly there seems to be a repeated failure in exploring patient's *intention* when they seek reassurance - defined here as: *'the desire, plan, purpose, aim or belief that is oriented towards some goal, some end state'* which then drives the behaviour. This oversight can cause problems, in the sense that, ERS is repeatedly responded to by offering further examinations or discussions that include no new and/or irrelevant information that simply strengthen the vicious cycle. In other words, topographically all reassurance seeking in medical settings (as well as elsewhere) can look the same (e.g., "Doctor, doctor...is something wrong with my health?!"). It is argued here that the similarities can be superficial, and without exploring the person's intentionality, practitioners (no matter their profession) may fail to realize that reassurance seeking can actually mean different things for different people. This has immense implications in terms of how to respond to requests for reassurance, because practitioners should deal differently with requests for reassurance if they are motivated by different things; this is a key point. To give an example, we could imagine that two patients attended a doctor's appointment, both feeling anxious and both asking him the same question: "doctor, doctor...Is it normal to have a headache for 2 weeks?" When would this type of reassurance become problematic? Here we have a behaviour that topographically is the same, but for Patient A the reassurance seeking is a safety-seeking behaviour motivated by threat beliefs and aimed at decreasing levels of uncertainty and dispersing responsibility to the doctor. In contrast, for Patient B, the reassurance seeking is simply an adaptive coping strategy aimed at helping him to deal with the headache alone, with no further fears about the consequences of the headache. Once again, the intention of the behaviour is crucial in making that distinction.

Reassurance in Cognitive Behavioural Treatment

Before trying to work out what clinicians *should* be doing we need to know what they are currently doing. A good starting point is to look at various handbooks and treatment manuals written by leading authority figures in the field of cognitive and behavioural psychotherapy. Surprisingly, popular clinical handbooks and treatment manuals, frequently used for clinical training purposes, do not give excessive reassurance seeking much attention (Barlow, 2004, 2014;

Clark & Beck, 2011). Extending the review to research and clinical papers published in respected journals suggests that exposure response prevention still remains the most commonly recommended approach for treating ERS, particularly within the context of OCD or health anxiety (Abramowitz & Braddock, 2008; Furer et al., 2001; Rachman, 2002; Taylor et al., 2005).

It seems that most attention (in terms of existing literature) has been paid to the risks of therapists inadvertently giving reassurance during treatment. This is of course an important point - such behaviour can have a neutralizing effect, and thus interfere with direct exposure to the actual feared situation or a successful outcome from a behavioural experiment. The provision of reassurance from a therapist can of course take various forms; Freeston and Ladouceur (1999) described how repeating information, such as psychoeducational material, to a patient may become a form of reassurance. Similarly, Abramowitz et al. (2003) encourages therapists to be aware of what they say to patients before and during exposure tasks, where certain discussions may mistakenly reassure the patient about the 'safety' of performing such tasks. Whittal and McLean (1999) highlight the subtle differences between surveys and reassurance seeking and describe how their team would only allow patients to obtain information once through surveys (or by asking the therapist) but if requested a second time, this behaviour would be conceptualized as reassurance seeking. Similarly, Abramowitz et al. (2003) recommends as a general rule to respond to patients questions about exposure tasks only once. Finally, van Oppen and Arntz (1994) identified reassurance as one of the pitfalls associated with CBT for OCD, where cognitive interventions used in treatment sessions can become a form of reassurance, for example, when an OCD patient starts repeating in his own mind in a ritualized manner why he or she is not a paedophile.

It is most consistent with the principles of exposure and response prevention for patients to engage in exposure tasks without having to check with the therapist about the safety of such tasks. However, it is important to note that, although exposure and response prevention is commonly recommended and frequently used as a treatment approach for anxiety problems, it seems likely (although no data exists to support or refute this) that the merging of behavioural and cognitive theory has meant that few clinicians nowadays use ERP in its purest form, i.e. using systematic prolonged graded exposure based on the habituation model. For example, modern ERP typically involves psychoeducational components and cognitive restructuring. Similarly, when doing CBT, prescribed behavioural experiments often involve some form of exposure (Shafran et al., 2013). With regards to the treatment of ERS, the merge between behavioural and cognitive principles, is evident to some extent in writings by leading figures in the field, such as Abramowitz

et al. (2003) and Clark (2004). As an example, Abramowitz and colleagues (2003) talk about consulting authority figures, such as priests, in the treatment of patients with scrupulosity to offer assurance about what is and what is not a religious sin. They also give guidance on how therapists can react to reassurance seeking during exposure and response prevention; for patients, who cannot resist the urge to seek reassurances about the safety of the task, the first inclination may be to give guarantees, i.e. reassurance, that they are not in any danger. The authors correctly point out that this may undermine the exercise. Thus, a more preferable response (according to the authors), is based on the idea that it is not necessary to try to convince patients that they are not in danger – so therapists should compassionately, re-direct the patient's focus on how the exposure task is designed to evoke uncertainty and carry on with the task. Any additional attempts to gain reassurance should be responded to in a similar fashion. Comparable suggestions have been put forward by Clark (2004), who recommends therapists to respond to reassurance by reminding the patient about the unhelpfulness of the behaviour and redirecting therapy back on track in a gentle, supportive fashion.

Given the above, it seems that the exposure response prevention principle is still recommended for treating ERS, but with a 'softer touch'. Nevertheless, the focus on treating ERS still remains the same; it is about stopping the patient seeking reassurance and his carers providing it, as opposed to changing the beliefs that motivate the behaviour. The application of a softer touch is perhaps not surprising given that ERP has been identified as an important factor for explaining why patients drop out or do not seek psychological treatment for problems such as OCD (Shafran et al., 2013). In short, patients are often put off by what ERP requires of them (e.g. touching the feared contaminants and not engaging in compulsions) and this has called for changes to how psychological treatments, such as CBT are delivered. This is evident in the increased use of imagery interventions and judicious use of safety behaviours to name few examples (see further Radomsky, Shafran, Coughtrey, & Rachman, 2010; Shafran et al., 2013).

Resistance is futile?

It is suggested here that the key factor is that clinicians and theorists have addressed the wrong question when it comes to treating ERS. The main focus has mostly been on: 'how do we get patients to stop seeking reassurance and other people to stop providing it?'. This is problematic because it is entirely focused on the fact that reassurance has been sought as opposed to trying to weaken the belief that motivates the behaviour. Perhaps it might be more appropriate to consider: 'are there any other behaviours that are more adaptive, which sufferers and caregivers can substitute for reassurance?'.

So what should therapists be doing? The answer to this question is twofold. First, we need to look at what therapists can do for patients who are not seeking treatment and second what therapists should be doing for patients who are in treatment. It is argued here that for patients who are not seeking treatment and where their carers feel they do not have access to an alternative response, it is entirely inappropriate for therapists to be recommending prescriptively that reassurance is withheld.

This, then, is the dilemma: providing reassurance within the context of OCD and health anxiety (and probably other anxiety disorders as well) almost certainly maintains the problem, but doing so makes it possible for patients to manage their anxiety in the short-term. Contrast this with patients who are seeking treatment where therapists should help them find alternatives to seeking reassurance. That alternative has been identified in this thesis as support seeking; the patient is helped to move from reassurance seeking to support seeking within the context of a discussion of 'theory A and theory B'. This is by no means an easy solution - excessive reassurance seeking remains a very complicated behaviour and substituting it with support is not necessarily straightforward but could possibly prove to be a helpful alternative.

Study aims

At the start of the chapter the author set out to answer three related questions. In doing so, approximately two hundred therapists with varying degrees of expertise were recruited and asked to complete a questionnaire specifically designed for this study. The first question relates to the phenomenology of ERS - specifically whether therapists perceive ERS to be confined to a particular disorder. The second question relates to whether the amount of clinical experience has an effect on therapist beliefs about ERS. For example, do international experts view ERS differently relative to less experienced therapists? Participants in this study were presented with a list of forty-seven statements about ERS and asked to rate how much they agreed with each statement. The therapist ratings were then factor analysed, with five distinct factors identified. Subscale scores were then compared between groups. The third and final question, relates to the treatment of ERS or more specifically what treatment techniques therapists find essential when treating (or working with) ERS within the context of CBT. To explore this, participants were provided with a list of treatment 'techniques' and asked to choose those they felt were essential for treating ERS and those they felt were undesirable. Again, comparisons were made between the qualified therapists and international experts.

Method

Procedure

This study received ethical approval from the University of Bath, Department of Psychology Ethics Committee (Ref. 12-082).

All of the participants were provided with a copy of the information sheet which described the purpose of the study. They were requested to sign a consent form before filling in the questionnaire. Participants were mostly recruited through workshops (80%), and asked to fill in the questionnaire pack prior to the start of the workshop. The remaining 20% were approached via NHS psychology services or University institutions (see further below) and offered to fill in a paper format or an online version of the questionnaire.

Participants

In total 197 participants took part in this study. The sample was split into the following three groups: (i) international expert therapists; (ii) qualified therapists with up to five years of clinical experience; or (iii) qualified therapists with more than five years of clinical experience.

International Expert Therapists

20 participants of the total 197 consisted of international expert therapists who were specifically approached and invited to participate in the study. Members of the expert group consisted of people who have extensive clinical experience in specialist settings in addition to training therapists and publishing extensively in the field of clinical psychology, in particular cognitive behavioural theory and practice. As an example, some members belong to the Obsessive Compulsive Working Group, an international working group consisting of experts in the field of OCD.

Qualified Therapists with up to Five Years of Clinical Experience

89 qualified therapists with up to five years of clinical experience were recruited (cumulatively 51.1% of the qualified therapists sample had less than five years of experience). All of the participants were psychological therapists, with some differing therapeutic and clinical training backgrounds. The participants were either attendees at CBT workshops for the treatment of anxiety problems or members of a mental health team, working within the NHS, which was specifically approached for this study

Qualified Therapists with more than Five Years of Clinical Experience

88 qualified therapists with over 5 years of clinical experience were recruited. Again, the recruitment procedure involved asking for volunteers attending CBT workshops or members of mental health teams.

Measures

Therapist Beliefs about Reassurance Seeking in Emotional Disorders Scale

The Therapist Beliefs about Reassurance Seeking in Emotional Disorders Scale (TBRS) is a self-report measure that was specifically designed for this study, in order to examine therapist beliefs and experiences of reassurance seeking within the context of various emotional disorders. It also explores therapist reactions to requests for reassurance, how therapists understand the function of reassurance and what treatment techniques they consider essential when treating (or working with) ERS. The questionnaire is split into the following three parts:

- i. The first part enquires about: participants' demographics; what therapeutic model they use in their practice; their experience in treating emotional problems over a 12 month period; and finally what disorders they associate reassurance seeking with.
- ii. The introduction to the second part of the questionnaire is as follows: "Please consider how much you agree with the following statements in relation to ALL emotional disorders unless otherwise specified". The respondents are asked to rate how much they agree with each of the forty-seven statements using a scale from 0 ("Do not agree at all") through 100 ("Agree completely"). The item content was generated based on description of the mechanisms commonly associated with reassurance seeking in emotional problems, particularly in the anxiety disorders. Items were also created through consultation with two senior clinical researchers, one of whom has published extensively on the function of and treatment for reassurance seeking.
- iii. The final part of the questionnaire lists sixteen treatment elements/techniques thought to be relevant to CBT treatment for anxiety problems for individuals who persistently seek reassurance. The item list was generated in discussion with three accredited clinical psychologists and CBT experts (they are not part of the sample) who have all published extensively within the field and specialized in treating emotional problems (in addition to the author). The items were also derived from examining the CBT literature on treatment for reassurance seeking (as discussed in the introduction part of this chapter). After piloting the list with experienced

therapists some items were removed and the final version consisted of sixteen items. The introduction to this part of the questionnaire was as follows: “This questionnaire refers to Cognitive and Behavioural Therapies for anxiety disorders for individuals who seek reassurance persistently. For such patients please choose one column according to whether you think each of the following treatment elements are *undesirable*; *not necessary*; *preferable*; or *essential* when treating individuals that seek reassurance persistently”.

The full questionnaire can be found in Appendix E.

Data Analytic Strategy

Data were analysed using IBM SPSS (2013). As stated at the beginning of this chapter, the author set out to answer three related questions (see page 144). The treatment of data was as follows with regards to each question:

- i. The first analysis explored whether therapists believe that ERS is a transdiagnostic process not confined to a particular disorder. This required standard descriptive analysis. Pearson’s Chi Squared Tests, and where appropriate, Fisher’s exact tests were performed to test for associations between groups on categorical variables. If significance was noted in the 3 x 2 comparisons, further partitioned Chi Squared tests were performed, in which one group was excluded from analysis and 2 x 2 Chi Square comparisons were run on the remaining two groups. To counteract the problem of multiple comparisons, the Holm-Bonferroni method with 14 comparisons was also employed.
- ii. The second analysis examines whether therapist experience has an effect on their beliefs about ERS. Firstly, the sample was combined into one group for descriptive analysis of the TBRS scale. Secondly, all of the 47 questionnaire items were entered into a factor analysis using Varimax rotation, in order to determine the constructs or domains within the questionnaire. Varimax rotation maximizes the variances of the loadings within the factors while also maximising differences between the high and low loadings on a particular factor. In other words higher loading on a factor are made higher and the opposite for lower loadings, i.e. lower loadings are made lower (Pett, Lackey, & Sullivan, 2003). Following rotations, the number of factors was determined by examining the scree plot. Descriptive data was calculated for each factor item and alpha coefficients for each factor. Finally, for comparisons between the three groups and their belief scale factors score, a mixed model ANOVA was used. Where there was evidence that the data

violated the sphericity assumption, an epsilon adjustment was made and Huynh-Feldt correction used (Field, 2013)⁷.

- iii. The third analysis explores what treatment interventions therapists find essential and should be part of CBT for excessive reassurance seeking by examining distribution and proportionality of responses. Participants were provided with a list of sixteen treatment interventions and were asked to indicate whether each intervention was 'undesirable' in CBT for ERS (this was coded as -1); 'not necessary' (coded as 0); 'preferable' (coded as 1); and 'essential' (coded as 2). To determine whether an intervention should be part of CBT or not part of CBT for persistent reassurance seeking, the following criteria were employed: for a treatment intervention to be considered *part of CBT*, no more than 10% of the sample could have rated that item as undesirable, and more than 50% of the sample rated it as either preferable or essential. In order to categorise a treatment element as *not part of CBT* for ERS, less than 10% of the sample rated it essential, and more than 75% rated it as either undesirable or not necessary. This coding scheme was based on previous research by Stobie (2009) who investigated therapist beliefs about OCD.

Results

Overview

The result section is split into six sections:

- i. Section one describes the participant's demographic status and their current clinical contact.
- ii. Section two provides overview of what disorders the therapists associated reassurance seeking with.
- iii. Section three process a descriptive overview of the TBRS scale (the section which includes forty-seven statements about reassurance), by listing the means and standard deviations for each item.
- iv. Section four investigates the TBRS scale factor analysis.
- v. Section five compares how the three groups scored on each factor.
- vi. Finally, section six examines which treatment interventions participants in each group found being part of CBT versus not part of CBT when treating ERS.

⁷ When $\epsilon > .75$ use HF; when $\epsilon < .75$ use GG

Section I: Demographic Status

Demographic status for each group is presented in Table 7.

Table 7. Demographic information

		International Expert Therapist (n = 20)	≤5 years of Clinical Experience (n = 89)	>5 years of Clinical Experience (n = 88)
Gender	% (n) Female	35 (7)	69.7 (62)	72.7 (64)
Age	M (SD)	55.95 (10.80)	35.50 (8.58)*	47.32 (8.66)
Clinical experience	M (SD)	25.65 (12.38)	2.88 (1.34)	15.10 (7.92)
Therapeutic model	% CBT	100	95.5	86.2*
	% Counselling	0	1.1	1.1
	% Eclectic	0	2.2	1.1
	% Integrated	0	1.1	4.6
	% Psychiatric	0	0	2.3
	% Psychodyn.	0	0	1.1
	% Systemic	0	0	1.1
	% Other	0	0	2.3

*Missing n=1

International Expert Therapists: In total, 22 experts were invited to participate in the study and 20 took part, resulting in 91% response rate. All the experts said that CBT was their main therapeutic approach.

Qualified therapist with up to five years of clinical experience: This group consisted of 89 participants. In terms of their current job roles, 57.3% reported being employed as a CBT therapist; 23.6% were Clinical Psychologists; 7.9% were Counselling Psychologists or Counsellor; and the remaining participants were Nurses (4.5%), Medics (2.2%); Mental Health Practitioner (2.2%); or Other (2.2%). Almost all the therapists, 95.5% recognized CBT as their main therapeutic approach.

Qualified therapist with more than five years of clinical experience: This group consisted of 88 participants. In total, 40.9% were working CBT therapists; 35.2% were Clinical Psychologists; 8% were nurses; 6.8% were Counselling Psychologists or Counsellor; 4.5% were Medics; 1.1% were Mental Health Practitioners; 1.1% were social workers; and the remaining 2.3% were defined as Other. In total, 86.2% described CBT as their main therapeutic model.

For statistical analysis of 'therapeutic model', the non-CBT models were collapsed into one group (due to small numbers). 3 x 2 Chi square tests indicated a significant association between the type of therapeutic model and group, $\chi^2(2) = 7.054$, $p = .029$. Further partitioned Chi Square tests using Fisher's exact test revealed that the qualified therapists with over 5 years of experience were more likely to report non-CBT models as their main therapeutic model in comparison with the less experienced therapists, $p = .038$. However, when adjusting for multiple comparisons (Holm-Bonferroni correction) the significant association did not remain.

Clinical Contact (Qualified Therapists Only)

Type and amount of treated disorders is relevant because it may impact on therapist exposure to ERS and consequently their beliefs about the behaviour. Thus, clinical experience was both measured in years working as a therapist post qualification and also by asking participants to estimate how many patients they had treated (with a given diagnosis) over the last 12-month period. Chi Square tests revealed that there was a significant association between group (up to five years of clinical experience versus over five years of clinical experience) and one disorder, i.e. OCD, $\chi^2(5) = 12.966$, $p = .029$. This suggests that the qualified therapists with less than five years of experience have had more clinical contact with OCD patients over the last 12-months compared to their colleagues with more than five years of clinical experience. However, when adjusting for multiple comparisons by applying Holm-Bonferroni correction (with 14 comparisons and alpha = .05) significance was lost. No other associations were found, suggesting that both groups were seeing equal number of patients and treating similar problems.

Section II: Is Reassurance Seeking Confined to a Particular Disorder?

Figure 8 shows the percentage of participants in each group who felt that reassurance seeking was a common feature in any of the given emotional problems. Overall, a proportion of participants in each group reported reassurance seeking to be a common feature in all thirteen disorders (apart from the expert group where no participants associated reassurance seeking with substance misuse). Participants were most likely to report reassurance seeking to be a common feature in anxiety problems compared to other emotional problems such as personality disorders. Therapists were most likely to report reassurance seeking to be a common feature in OCD and health anxiety with over 80% of participants in each group stating that view.

3 x 2 Pearson Chi Square comparisons were conducted between the three groups and whether reassurance seeking was considered a feature in a given disorder or not. Results indicated that there was as a significant association between participants experience and whether or not they thought reassurance seeking was a common feature in Panic Disorder, $\chi^2(2) = 13.272$, $p = .001$.

Further partitioned Chi Square analysis revealed that the expert group was less likely than the other two groups to associate reassurance seeking with panic disorder. Significant difference remained between the expert group and the therapists with up to five years of clinical experience when Holm-Bonferroni correction was employed.

Results also indicated that there was a significant association between groups and whether or not they thought reassurance seeking was a common feature in Social Phobia, $\chi^2(2) = 8.335, p = .015$. A significantly lower proportion of experts reported reassurance seeking to be a problem in social phobia compared to qualified therapists with up to five years of clinical experience. However, this difference was no longer significant when Holm-Bonferroni correction was employed. No other significant differences were found ($p > .05$).

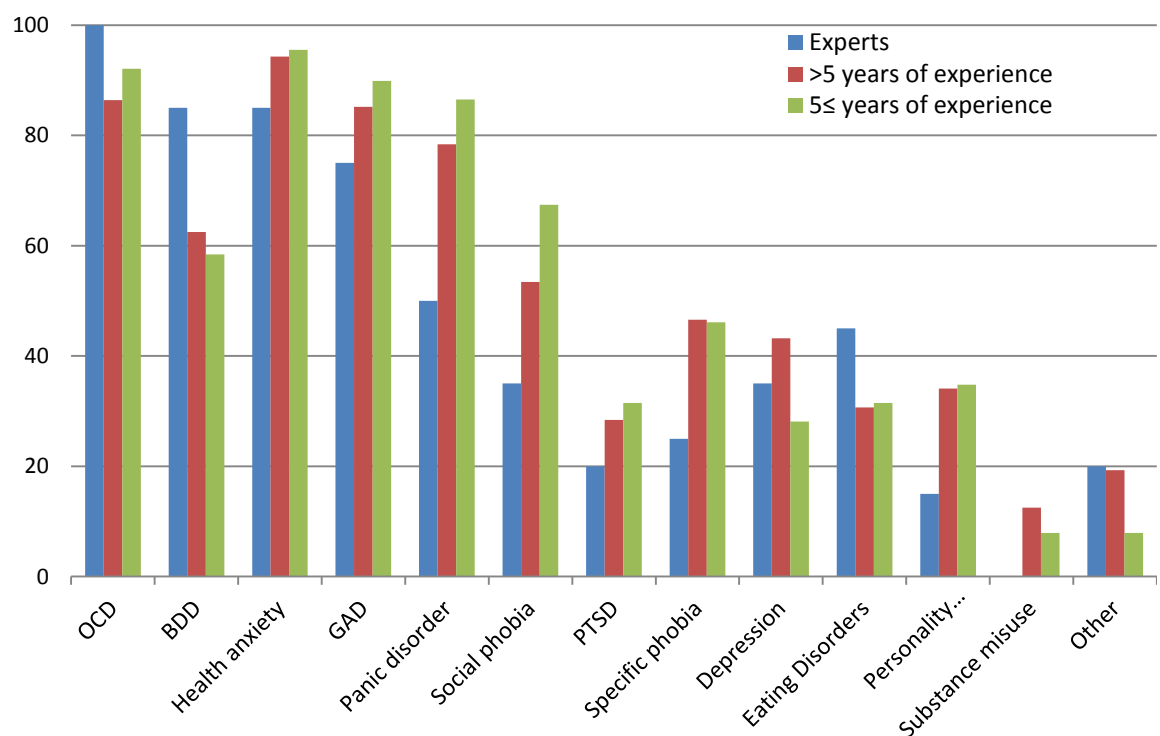


Figure 8. Percentage of participants who link excessive reassurance seeking with specific disorders

Section III: Scale Descriptives for the TBRS

This section provides a descriptive overview on the TBRS scale, by listing the means and standard deviations for each of the scale items (see Table 8). Item means were calculated for each of the 47 items, for the whole sample that completed the questionnaire ($n = 197$). Missing data meant that the number of participants answering each item ranged from 185 to 197.

Table 8. Descriptive overview of the Therapist Beliefs about Reassurance Seeking Scale

Items	N	Mean	SD
Item 14: Repeated provision of reassurance may contribute to the maintenance of emotional disorders	196	91.05	13.683
Item 6: Reassurance seeking is a common problem in clinically anxious people	197	86.37	16.634
Item 47: The reductions in anxiety that follow repeated reassurance are at best temporary	197	86.29	21.618
Item 12: Requests for reassurance are attempts to reduce anxiety	197	84.90	19.351
Item 4: There are negative effects of offering reassurance	197	83.50	20.688
Item 30: When patients are anxious they find it very difficult to resist seeking reassurance	197	81.98	17.013
Item 36: Providing reassurance increases the urge for further reassurance	197	80.23	21.353
Item 31: Providing reassurance may enhance anxiety	197	79.06	21.671
Item 37: Patients usually believe that reassurance seeking is helpful	197	73.96	21.466
Item 32: Giving reassurance typically increases the patient's doubts	197	69.72	25.042
Item 8: I feel confident in managing repeated requests for reassurance from my patients	197	68.65	24.653
Item 29: Repeated reassurance seeking can be a problem because it can lead to alienation	195	68.00	25.048
Item 39: Repeated reassurance seeking has a damaging effect on interpersonal relationships	197	67.72	25.251
Item 16: Subtle reassurance seeking tends to occur undetected in the course of therapy	197	63.25	24.072
Item 11: It is very important to be precise in the reassurance I offer to my patients	195	61.85	36.137
Item 28: Patients are aware that repeatedly seeking reassurance can strain and drain other people	197	59.72	26.545
Item 21: Repeated reassurance seeking is always problematic	196	59.39	32.705
Item 17: Patients often feel guilty when they seek reassurance repeatedly from other people	197	58.78	23.458
Item 15: Clinically depressed individuals typically don't seek reassurance persistently	197	50.08	29.643
Item 22: Responding to repeated requests for reassurance may enhance depression in depressed individuals	194	49.30	26.081
Item 23: Carefully planned reassurance can be helpful in treatment of anxiety disorders	197	47.56	30.874
Item 27: It is pointless to offer reassurance	195	41.62	32.001
Item 24: Reassurance seeking is a common problem in clinically depressed people	196	40.20	24.284
Item 33: I will upset my patients if I do not offer reassurance when requested to do so	197	33.91	25.584
Item 18: Giving reassurance is particularly important when treating depressed individuals who seek it	195	33.85	26.312
Item 20: Reassurance seeking is only problematic in some anxiety disorders	197	33.43	30.402
Item 10: I feel frustrated when patients frequently seek reassurance from me	197	33.35	27.663
Item 46: If requests for reassurance are ignored they will eventually cease	196	33.32	31.639

Item 26: Seeking reassurance reduces uncertainty for the patient	195	28.51	30.096
Item 25: When a patient asks me for reassurance about their fears, it can have the effect of increasing my own feelings of doubt	197	27.39	27.178
Item 13: I should never offer my patients any reassurance	197	27.34	31.886
Item 7: Providing of reassurance can alleviate my client's fears and doubts	197	26.42	25.077
Item 34: I should ignore all request for reassurance from my patients	197	23.15	27.953
Item 1: Giving reassurance usually forms part of effective psychological treatment	197	22.46	24.731
Item 38: I feel guilty if I withhold reassurance	197	22.31	22.938
Item 42: I find it very hard to resist giving my patients reassurance	197	21.70	22.577
Item 35: When a patient asks me for reassurance about their fears, it can have the effect of making me feel anxious	197	21.04	23.163
Item 40: Giving reassurance typically decreases the patient's doubts	197	20.15	23.441
Item 2: Providing reassurance is an appropriate treatment technique	197	19.70	22.743
Item 5: Providing reassurance is an effective way to help my patients understand that they don't need to be worried	197	16.50	22.653
Item 41: When a patient is acutely anxious the only thing a family member can usefully do is to provide reassurance	197	15.48	23.088
Item 45: By offering reassurance I show my clients that I care	197	15.28	20.979
Item 44: Patients who seek reassurance repeatedly from me do not trust me	196	9.95	16.330
Item 19: Repeated requests for reassurance are a form of 'attention seeking'	197	9.85	17.605
Item 43: Sometimes all I have left to offer my patients is repeated reassurance	197	8.83	14.791
Item 3: Giving reassurance is always helpful	197	8.38	17.486
Item 9: I should always offer my patients reassurance when requested	197	6.42	12.556

Section IV: Factor Analysis for the TBRS

Preliminary analysis of the correlation matrix indicated no problems with multicollinearity.

Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were used to evaluate the strength of the linear associate among the 47 items in the correlation matrix. Bartlett's test of sphericity was highly significant, $\chi^2 = 3171.459$, $p < .0001$, (indicating that the correlation matrix was not an identity matrix) and the value of the KMO was 0.73, suggesting that factor analysis was appropriate (Field, 2013).

The model that best fit the data was based on 5-factors (using Varimax rotation). They were:

- 1) Advisability of giving reassurance
- 2) Linking reassurance and anxiety
- 3) Personal difficulties in dealing with reassurance
- 4) Struggling with not giving reassurance
- 5) Positive beliefs about reassurance

Factor loadings, means and standard deviations for each item are displayed in Table 9. Each questionnaire item could be scored from 0 (“Don’t agree at all”) to 100 (“Agree completely”). Factor loadings below 0.4 were suppressed, i.e. loadings above 0.4 were considered to represent substantive values. Items with multiple loadings on factors (these included three items) were allocated to the factor where they had the highest loading and conceptually made most sense (Pett et al., 2003). Alphas for the five factors were then calculated, ranging from .68 to .75, suggesting good internal consistency based on Chronbachs recommendations (Field, 2013).

Table 9. Factor loadings, means and standard deviations

Factor 1 – Advisability of giving reassurance	Factor loadings:	Mean	SD
Item 13: I should never offer my patients any reassurance	-.757	27.34	31.89
Item 27: It is pointless to offer reassurance	-.704	41.62	31.84
Item 34: I should ignore all request for reassurance from my patients	-.513	23.15	27.95
Item 21: Repeated reassurance seeking is always problematic	-.483	59.39	32.62
Item 1: Giving reassurance usually forms part of effective psychological treatment	.475	22.46	24.73
Item 23: Carefully planned reassurance can be helpful in treatment of anxiety disorders	.473	47.56	30.87
Item 18: Giving reassurance is particularly important when treating depressed individuals who seek it	.435	33.85	26.18
Factor 2 – Linking reassurance and anxiety			
Item 31: Providing reassurance may enhance anxiety	.759	79.06	21.67
Item 32: Giving reassurance typically increases the patient’s doubts	.687	69.72	25.04
Item 30: When patients are anxious they find it very difficult to resist seeking reassurance	.550	81.98	17.01
Item 16: Subtle reassurance seeking tends to occur undetected in the course of therapy	.497	63.25	24.07
Item 36: Providing reassurance increases the urge for further reassurance	.465	80.23	21.35
Item 46: If requests for reassurance are ignored they will eventually cease	.435	33.32	31.56

Factor 3 – Personal difficulties in dealing with reassurance				
Item 35: When a patient asks me for reassurance about their fears, it can have the effect of making me feel anxious	.745	21.04	23.16	
Item 25: When a patient asks me for reassurance about their fears, it can have the effect of increasing my own feelings of doubt	.728	27.39	27.18	
Item 10: I feel frustrated when patients frequently seek reassurance from me	.527	33.35	27.66	
Item 8: I feel confident in managing repeated requests for reassurance from my patients	-.526	68.65	24.65	
Factor 4 - Struggling with not giving reassurance				
Item 42: I find it very hard to resist giving my patients reassurance	.776	21.70	22.58	
Item 38: I feel guilty if I withhold reassurance	.615	22.31	22.94	
Item 43: Sometimes all I have left to offer my patients is repeated reassurance	.573	8.83	14.79	
Item 45: By offering reassurance I show my client that I care	.566	15.28	20.98	
Factor 5 - Positive beliefs about reassurance				
Item 3: Giving reassurance is always helpful	.788	8.38	17.48	
Item 4: There are negative effects of offering reassurance	-.733	83.50	20.59	
Item 2: Providing reassurance is an appropriate treatment technique	.514	19.70	22.74	
Item 9: I should always offer my patients reassurance when requested	.466	6.42	12.56	

Because coefficient alpha is influenced by the number of items on a scale, the average inter-item correlation was also examined to assess the internal consistency of the scales based on Clark and Watson (1995) recommendation. According to Clark and Watson, an inter-item correlation of .15 to .20 is required for assessing broad constructs, whereas for a reliable and valid measure of a narrower construct (like in this case), a higher inter-item correlation is desired. Average inter-item correlations for the five factors were consistent with recommendations for assessment of narrower constructs, ranging from .283 to .412. A summary of the properties for the scale with five factors based subscales is presented in Table 10.

Table 10. Correlation analysis of the Therapist Beliefs about Reassurance Seeking scale

Factor	Label	Total items	Range of loadings	Alpha	AIIC
1	Advisability of giving reassurance	7	.435 to .757	.75	.302
2	Linking reassurance and anxiety	6	.435 to .759	.68	.283
3	Personal difficulties in dealing with reassurance	4	.526 to .745	.68	.384
4	Struggling with not giving reassurance	4	.566 to .776	.73	.412
5	Positive beliefs about reassurance	4	.466 to .788	.71	.401

* Note AIIC: Average Inter-Item Correlations. N 197

Section V: Does Amount of Clinical Experience Have an Effect on Therapist Beliefs About ERS?

A mixed model ANOVA was conducted with the three group conditions (qualified therapists with less than five years of clinical experience; therapists with more than five years of clinical experience; and international experts) as a between-subjects factor and the five factors identified earlier as a within-subjects factor. Mauchly's test indicated that the assumption of sphericity had been violated $\chi^2(9) = 85.60$, $p < .0001$, therefore degrees of freedom were corrected using Huynh-Feldt estimates of sphericity. This analysis revealed a significant main effect of subscales, $F(3.32, 644.37) = 339.23$, $p < 0.0001$ but the between groups factor was not significant $F(2, 294) = 0.99$, $p = .91$. These main effects were modified by a significant interaction (group by subscale), $F(6.64, 644.37) = 3.84$, $p < .001$. Figure 9 displays the mean ratings on the five subscales for each of the three groups.

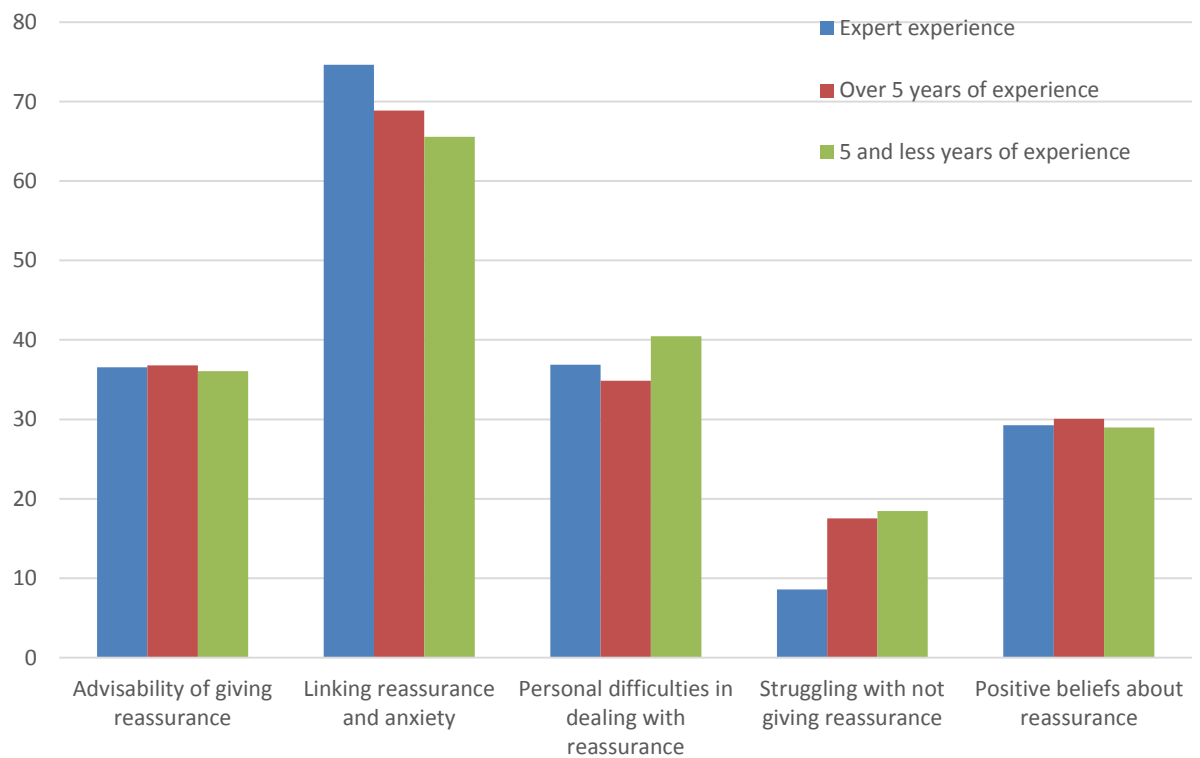


Figure 9 Groups' mean ratings on the five different subscales

As a significant interaction was found, a simple main effect one way ANOVAs were conducted that revealed that the groups differed significantly with regards to their ratings on three subscales: “Linking reassurance and anxiety”, $F(2, 194) = 3.441, p = .034$; “Personal difficulties in dealing with reassurance”, $F(2, 14) = 3.613, p = .029$; and “Struggling with not giving reassurance”, $F(2, 194) = 3.597, p = .029$. No significant differences were found between the three groups scoring on the remaining two subscales: “Advisability of giving reassurance”, $F(2, 194) = .111, p = .895$; and “Positive beliefs about reassurance”, $F(2, 194) = .290, p = .749$. LSD post hoc tests showed that for the “Linking reassurance and anxiety subscale”, the expert group ($M = 74.63, SD = 18.88$) scored significantly ($p = .013$) higher than the qualified therapists with up to five years of clinical experience ($M = 65.58, SD = 13.99$). For the “Personal difficulties in dealing with reassurance” subscale, LSD post hoc comparisons showed that qualified therapists with over five years of clinical experience ($M = 34.87, SD = 12.69$) scored significantly lower ($p = .008$) than qualified therapists with less experience ($M = 40.48, SD = 17.78$). Finally, Dunnett’s T3⁸ post hoc tests revealed that the expert group ($M = 8.56, SD = 9.44$) scored significantly lower on the “Struggling with not giving reassurance” subscale, when compared with the other two groups ($p < .01$). Other between group comparisons did not differ significantly.

Section VI: What Treatment Techniques do Therapists Consider Essential to CBT for ERS?

Table 11 displays the number of experts endorsing each item (treatment intervention), the item mean and standard deviations. The items have here been grouped together into three groups based on whether the experts considered them “*Part of CBT*” (from the highest mean to the lowest), “*Not part of CBT*” (from the lowest mean to the highest), or “*Undetermined*” (i.e. the participants were not in agreement whether this should or should not be part of CBT). Tables were also produced for the other two participant groups detailing their results. Given the similarity in findings between groups these tables have been put in Appendix F.

⁸ Levene’s test was significant for Factor 4: Struggling with not giving reassurance ($2, 194$) = $4.700, p = 0.010$, breaking the assumption of homogeneity of variance. Thus, Dunnett’s T3 test was conducted. However, it should be noted that data transformation was employed (factor scores squared) and the data re-analysed revealing the same results as without transformation.

Table 11. Experts' consensus on what treatment interventions are important for ERS

<i>Treatment Intervention</i>	<i>Item Mean (SD)</i>	<i>N</i>	<i>Undesirable n (%)</i>	<i>Not necessary n (%)</i>	<i>Preferable n (%)</i>	<i>Essential n (%)</i>
SHOULD BE PART OF CBT						
Offering a rationale for the detrimental role of excessive reassurance seeking	1.90 (.31)	20	0 (0.0%)	0 (0.0%)	2 (10.0%)	18 (90.0%)
Explaining the role of reassurance seeking in maintaining anxiety	1.85 (.37)	20	0 (0.0%)	0 (0.0%)	3 (15.0%)	17 (85.0%)
Helping your patient to develop an alternative response to seeking reassurance, e.g. support	1.80 (.41)	20	0 (0.0%)	0 (0.0%)	4 (20.0%)	16 (80.0%)
Exploring your patient's beliefs about reassurance seeking	1.80 (.41)	20	0 (0.0%)	0 (0.0%)	4 (20.0%)	16 (80.0%)
Working with your client to test out the effects of seeking reassurance repeatedly on their anxiety and urges to seek further reassurance	1.55 (.51)	20	0 (0.0%)	0 (0.0%)	9 (45.0%)	11 (55.0%)
Rehearsing with relatives/carers ways of responding without giving reassurance	1.50 (.61)	20	0 (0.0%)	1 (5.0%)	8 (40.0%)	11 (55.0%)
Weighing up the benefits and costs of seeking reassurance	1.50 (.61)	20	0 (0.0%)	1 (5.0%)	8 (40.0%)	11 (55.0%)
Exploring how and from whom your patient seeks reassurance	1.45 (.60)	20	0 (0.0%)	1 (5.0%)	9 (45.0%)	10 (50.0%)
Drawing a diagram explaining the problem with reassurance seeking, which includes links between thoughts, feelings and behaviours	1.45 (.60)	20	0 (0.0%)	2 (10.0%)	7 (35.0%)	11 (55.0%)
Inviting relatives/carers to a session in which reassurance is discussed	1.30 (.57)	20	0 (0.0%)	1 (5.0%)	12 (60.0%)	7 (35.0%)
Exploring the interpersonal effects of repeated reassurance seeking	1.20 (.62)	20	0 (0.0%)	2 (10.0%)	12 (60.0%)	6 (30.0%)
Advising relatives/carers to stop offering any reassurance	1.15 (.93)	20	2 (10.0%)	1 (5.0%)	9 (45.0%)	8 (40.0%)
SHOULD NOT BE PART OF CBT						
Offering your patient repeated reassurance when requested	-.90 (.30)	20	18 (90.0%)	2 (10.0%)	0 (0.0%)	0 (0.0%)
Being deliberately unresponsive to all requests for reassurance from your patient	-.65 (.67)	20	15 (75.0%)	3 (15.0%)	2 (10.0%)	0 (0.0%)
Allowing your patient to contact you outside therapy sessions if they need reassurance	-.60 (.68)	20	14 (70.0%)	4 (20.0%)	2 (10.0%)	0 (0.0%)
UNDETERMINED						
Strongly instructing your patient to stop seeking any reassurance	-.50 (1.05)	20	4 (20.0%)	6 (30.0%)	6 (30.0%)	4 (20.0%)

Comparisons between the three groups revealed that the categorisation of items were almost identical in all groups. That is, they were mostly in agreement in terms of what was considered part of CBT and not part of CBT for the treatment of excessive reassurance seeking. The only difference that was found was between the expert group and the qualified therapists with over five years of clinical experience. The members of the latter group did not agree on whether 'Being deliberately unresponsive to all requests for reassurance from your patient' should be part of CBT or not, whereas the experts rated this item as not part of CBT.

Discussion

This study sought to examine therapist beliefs about excessive reassurance seeking. In doing so, approximately two hundred qualified therapists were recruited and asked to fill in a questionnaire (Therapist Beliefs about Reassurance Seeking; TBRS), specifically developed for this study, enquiring about their experiences of ERS, how they understand its function and what they find important when it comes to treating ERS within the context of CBT. The TBRS's items were theoretically derived and an exploratory factor analysis resulted in a five factor solution reflecting therapist beliefs about ERS around the advisability of giving reassurance; linking reassurance and anxiety; personal difficulties in dealing with reassurance; struggling with giving reassurance; and positive beliefs about reassurance. The TBRS was found to possess good internal consistency.

Returning to the first question posed in the beginning of this chapter – *Do therapists consider reassurance seeking to be confined to a single disorder like DSM suggests?* – the answer, based on the findings reported here, appears to be *no* across all three groups. This is in agreement with the research literature where ERS has been associated with social phobia (Heerey & Kring, 2007), generalized anxiety disorder (Woody & Rachman, 1994), health anxiety (Abramowitz & Moore, 2007), OCD (Parrish & Radomsky, 2010) and panic disorder (Kobori & Salkovskis, 2013; Onur et al., 2007). However, in contrast to the depression literature (e.g., Starr & Davila, 2008), participants typically did not associate ERS with depression which may suggest that it goes undetected in treatment settings. A proportion of participants in each group associated ERS with other emotional problems as well (e.g., personality disorders). To the author's knowledge there does not exist literature either confirming or refuting this view. However, these results should be interpreted with caution because they are simply a measure of participants' experiences, but do suggest that there is room for expanding research on ERS beyond the anxiety disorders and depression.

This study also sought to examine if the amount of clinical experience has an impact on how therapists understand the function of ERS. The factor analysis of the TBRS scale offers some insight into this. Overall, despite therapists ranging from novice to highly experienced international experts, therapist experience did overall not have a greatly significant impact on their beliefs about ERS. However, some differences were identified - there was an indication that more clinical experience is helpful in terms of dealing with ERS in treatment settings, and associating it with anxiety. Also, experts seem to find it easier to resist giving into requests for reassurance compared with their less experienced colleagues. Bearing in mind that therapist experience is often seen as a proxy for therapist quality, based on the notion that more experience equals better therapist (Norton, Little, & Wetterneck, 2014), this finding may be seen as somewhat positive. That is, novice therapists are in agreement with experts on the function of ERS. However, an agreement between the groups does not guarantee 'correct' understanding of the function of ERS - they could all be equally wrong, highlighting the need for evidence to base such recommendations.

This takes us to the third question posed in the beginning of the chapter – What treatment interventions do therapists consider essential in CBT for ERS? In particular, are ERP principles still guiding therapists in CBT for ERS? – the answer to these questions are somewhat complex. Firstly, it seems that there is no relationship between therapist experience and what treatment interventions are considered part of CBT or not part of CBT when it comes to treating ERS. Secondly, it seems clear that therapists are guided by the current literature and encourage carers to stop giving reassurance, rehearse with the carer ways of responding without giving reassurance, and strongly instruct their patients to stop seeking any reassurance, all in concordance with ERP principles. However, this finding needs to be weighed up against other interventions which the therapists reported to be part of CBT. In particular, the therapists reported that patients should be helped to develop an alternative response to seeking reassurance, for example, support seeking. In addition, they did not feel it was part of CBT for therapists to be deliberately unresponsive to patient's requests for reassurance.

So what should therapists be doing? The author is not recommending eliminating interventions based on ERP principles - ritual prevention remains a critically important component of psychological treatments, such as CBT, particularly for anxiety related problems. However, within the context of ERS, findings reported in the preceding studies of this thesis suggest that withholding reassurance can cause problems by triggering negative emotional and behavioural reactions in the sufferer (e.g. aggressive behaviour). Thus, as discussed earlier, the author would

encourage a different approach to treating ERS; one which emphasises helping the person to seek a different response - a response which is not intended to avoid disaster. This should be presented within the context of an alternative explanation for the patient's symptoms using a theory A versus theory B framework (Salkovskis, 1999). This response, has been identified here as *support seeking*. But why should seeking support be any better? As a reminder, support seeking was defined earlier in the thesis as an *interpersonal behaviour, verbal or non-verbal, that is intended to get (or give someone) encouragement, confidence or assistance to cope with feelings of distress*. Thus when a person seeks support, the person is intending to deal with the perception of threat and the associated distress alone, with no further fears about the consequences of the perceived threat or anxiety. Consequently, this response is not catastrophe based and thus does not interfere with disconfirmation as in the case of reassurance seeking (Salkovskis, 1996a).

Study Limitations

Limitations should be kept in mind when considering the results of this study. The sample of qualified therapists consisted mostly of females. However, equal gender distribution in a study like this is always going to be problematic given the preponderance of female psychological therapists in the UK. Other sampling problems include the fact that the therapists were recruited from those who opted to attend CBT training workshops. Also, the expert therapists were not randomly chosen; they were 'handpicked' and approached specifically for this study with the assistance of the author's supervisor. Although they can be considered experts in their field and leading figures they may not represent the full range of experts. The extent to which the current findings are representative of the general population of therapists must await future research. Although the sample size in the current study was considered sufficient for exploratory factor analysis, sample sizing (item ratio) in factor analysis remains debated in the literature (Field, 2013; Floyd & Widaman, 1995). Thus, further studies with larger samples are necessary. Measuring therapist experience in years of clinical practice and patient contact is helpful, but is not a precise measure for therapist's experience for treating ERS or their exposure to patients presenting with this problem. A questionnaire study like this identifies verbal report rather than what actually takes place in treatment settings. The clinical reality might be completely different. A follow-up study would benefit from video recording sessions to see 'live' how therapists actually react to and treat ERS. Alternatively therapists could be asked to read vignettes of patients where ERS forms part of their presenting problem followed by open questions about how they would treat the problem (or deal with the situation).

Leaving aside the shortcomings of the study, it seems evident that excessive reassurance seeking remains poorly understood, calling into question how successfully it is dealt with in clinical settings. Having identified support seeking as a potentially helpful alternative, a logical next step is to offer experimental analysis of this intervention. The following chapter examines the effects of cognitive behavioural treatment for OCD and excessive reassurance seeking in an older adult presenting with severe and treatment refractory contamination related OCD. A single case experimental design was employed where daily ratings were recorded over 15 months allowing for a careful examination of the effects of helping an OCD patient move from reassurance seeking to support seeking within the context of a discussion of theory A versus theory B.

Chapter 6:

Are you sure that's not blood? Treatment of OCD and Excessive Reassurance Seeking in an Older Adult: A Single Case Experimental Design

"Blood, blood, blood, red, red, red...anything red now became a great fear to me. As a result, I was always looking out... and avoidance for me became terrible. I was looking for blood everywhere. On pavements, seats, handrails, and money - I even stopped using paper money and only used coins - door knobs, people with plasters on their fingers. The list was endless. I got into a terrible state. I was washing like mad. Throwing things away became the norm and life seemed to be impossible..." (A patient, referred here to as Nick, talking about how some of his contamination fears were brought to life in the wake of the AIDS epidemic).

"The stopping asking for reassurance (something I was doing all the time, and waiting to get home to go through the day with poor Mary and get her reassurance that I would be okay) it has been hard to stop doing this, but I have found in so doing it has further strengthened me in beating the OCD. It gives you much more confidence that you can do it, and on your own." ("Nick", talking about his CBT treatment and excessive reassurance seeking).

If OCD is left untreated, individuals tend to continue to experience significant symptoms and impairment for long periods and full remission is rare (Eisen et al., 2010). In fact some people suffer from it all their lives. For example, Skoog and Skoog (1999) studied the natural history of OCD in 144 inpatients treated prior to the introduction of current evidence based treatments. At a 40 year follow-up only 20% showed complete recovery. The course of OCD is often further complicated with the co-occurrence of other psychological disorders. Under such circumstances, the OCD is usually associated with greater symptom severity, negative treatment response, and a poorer prognosis, worse quality of life and general functioning (Hansen, Vogel, Stiles, & Gunnar Götestam, 2007; Huppert, Simpson, Nissenson, Liebowitz, & Foa, 2009; Storch et al., 2008).

Although cognitive behavioural treatment is currently recommended as a first line treatment for OCD (NICE, 2005), meta-analysis examining the effectiveness of psychotherapies (i.e. cognitive behavioural therapy, cognitive therapy and exposure and response prevention) suggest that few patients meet recovery criteria at the end of treatment (ranging from 27-47%) (Eddy, Dutra, Bradley, & Westen, 2004). However, as recently discussed by Shafran et al. (2013) our understanding of OCD is constantly increasing followed by advances in the cognitive behavioural treatment for the problem. A great example of this is the recent development in the understanding of mental contamination (Elliott & Radomsky, 2009; Rachman, 2010; Radomsky &

Elliott, 2009) and its treatment (Rachman, Coughtrey, Shafran, & Radomsky, 2014; Warnock-Parkes, Salkovskis, & Rachman, 2012).

Cognitive behavioural treatment for OCD often requires sufferers to confront their (deepest) fears. This is often done within the context of behavioural experiments (Bennett-Levy et al., 2004). It is crucial for therapists to understand how difficult (and frightening) this can be for anxiety sufferers. Considering that all of us would probably experience hesitation and anxiety if asked to confront our deepest fears, it is not surprising that people drop out of psychological treatments including CBT. In response to increase treatment acceptance and make CBT interventions more easily tolerated it has been argued that we should allow for the use of (some) safety behaviours in treatment (Shafran et al., 2013) (this literature was reviewed in detail in chapter 2 and 4 of this thesis). With regards to excessive reassurance seeking the author is unaware of any recent treatment developments specifically targeting this behaviour. Thus, it seems that we are still mainly guided by exposure and response prevention principles. However, Abramowitz, Baucom, Wheaton, et al. (2013) have argued that exposure response prevention treatment for OCD may be enhanced by incorporating interpersonal processes that maintain OCD symptoms and interfere with treatment. The authors do not go into any specific detail about the treatment of reassurance but do mention that carers should refrain from providing it and give support instead (see page 83-84).

In this thesis it has been argued that there is need for a new (more subtle) approach for treating excessive reassurance seeking - one that is not based on exposure and response prevention principles. This is thought to be particularly important in the treatment of severe anxiety where excessive reassurance seeking forms part of the presenting problem. How would that look in a real-life clinical settings? The following single case experimental design aims to start answering that question by describing CBT treatment based on Salkovskis (1985) cognitive model of OCD for an older adult who frequently engages in ERS as part of his longstanding and treatment refractory contamination related OCD. The participant's frequency of reassurance seeking, feelings of anxiety, urges to seek reassurance and OCD beliefs were measured and observed repeatedly over a period of 15 months. At the start of treatment the participant had been suffering from OCD symptoms for approximately seven decades, or since he was a young child, and spent many hours every week (or daily) obsessively washing himself, his clothes or other objects after having come in contact with feared objects.

Method

Experimental Design

In order to evaluate the effectiveness of CBT for OCD in a patient where excessive reassurance seeking (ERS) formed a major part of his presenting problem, a single case series using an ABCA experimental design (Barlow, Nock, & Hersen, 2008) with two follow-up measurements was implemented. The participant was assigned to a no-treatment baseline for 21 days (A). During the baseline, the participant took daily ratings of his OCD beliefs, feelings of anxiety and reassurance seeking and more (see below). Following baseline measures, CBT treatment was implemented which involved three phases, i.e. B¹, B¹B², and B¹B²B³. The treatment phase is expressed in this way to account for the expected (and intended) carryover effects (Barlow et al., 2008). Next, was the relapse prevention phase (C) and then two follow-up measurements (A). Treatment sessions were offered once a week at the beginning of treatment, but as treatment progressed the time between sessions was extended. Daily ratings were continued over a period of 15 months as well as monitoring his OCD symptoms using standard clinical measures (see below). On completion of treatment, the patient was followed up for 1 and 6 months. No CBT was offered between post-treatment and follow-up intervals.

Participant

“Nick” (not patient’s real name), presented to an outpatient specialist anxiety clinic as a 79 year old married male suffering from severe symptoms of contamination OCD. He was currently living with his partner and they had three children (who lived elsewhere). Nick was working as a tour guide in London. His general practitioner referred him to the anxiety clinic having relapsed following his most recent treatment episode. Nick gave his consent for details of this case and treatment to be published. Some details of his case history have been altered to anonymise the account.

History of Problem

As a young boy Nick remembers having an uncontrollable urge to perform a ritual of movements in a set pattern of threes with his hands touching always the same parts of his body; nose, elbows and knees. Complying with these urges resulted in punishments by his father. Nick is not sure why and how but this urge gradually passed. He worked as a paperboy for some time and remembers liking to read the headlines as he walked along the streets of London. Murder trials frequently made headlines, as did the hangings after the guilty verdicts. He remembers developing this fear that one day he would unwillingly commit murder and hang. At the time he did not understand

this fear and it worried him terribly and he felt he could not share this with anyone. This fear haunted him for years and he kept it secret from everyone. Nick left school when he was 15 with no qualifications. He went to sea as a deck boy and travelled the world and enjoyed the sea life. However, it was there at sea that his fears of contamination really began. As a young man he had never heard much about homosexuality (which was illegal in those days) but at sea anything went and a few of the stewards on board would dress up as women. Initially, Nick treated this just as part of the “colourful life of being at sea”, but after few voyages he started to worry that he might catch whatever it was that made them want to be women. This worry started to get worse and worse until one day in his early twenties whilst on leave at home he had a bonfire in the garden of many of his clothes, seamen’s books, and papers; quickly following that he gave up the sea. Again, he told no one about his fears. From then on, cleanliness started to become an obsession and he started washing obsessively every day. Nick accepted that this was how his life was going to be and he felt he could not change it. When Nick was 23 years old (mid 1950s) his OCD took a turn for the worse. He decided to seek professional help and was admitted to a psychiatric hospital in London for 7 months. He said:

“...there was plenty of electrical treatment going on, on our ward. Fortunately I was not given that. Stories of Lobotomies abounded. We were at least taken out, once a week, to have tea and cake. I looked forward to that. Otherwise I just read and helped the nurses push patients around. We also played records and board games. Eventually I was just discharged. Fortunately non the worse but no better either.”

Life carried on and in 1957, Nick started working for the postal service and got married. For the first time in his life he felt that he had someone to talk to about his OCD – this quickly turned into excessive reassurance seeking regarding his contamination fears and not surprisingly his OCD grew stronger. At that time, fear of nuclear war was in the air and the campaign for nuclear disarmament was founded. Then suddenly Nick realised that he was starting to worry about nuclear war and its aftermath of radiation. One day he trod on his watch, which had fallen on the floor indoors. He broke the glass. In those days, watches were luminous and Nick had read somewhere that luminous paint was radioactive so the same must apply to watches. He panicked. He washed the carpet, threw away the bucket and left it at that. However, the ‘OCD bully’ kept on and on and on. He could not sleep. He could not concentrate on work, and went backwards fast. In the end he threw the carpet away, in spite of the cost. This upset his partner greatly – they had a small baby at that time – and financially things were tight. Nick remembers:

“Suddenly I had a new great worry and fear...Radiation! It quickly increased in strength. I feared all watches, could not walk past a watch shop without crossing the road if I didn't I had to find puddles to walk in to decontaminate my shoes. I sat on people's right hand side on transport as nine out of ten people wear their watch on the left wrist. Soon almost everything green was luminous or could be. Avoidance and washing became my life. It became intolerable and I went back into the hospital.”

The year was 1970 and treatment had changed somewhat since he was last admitted. This time, Nick was helped to confront his fears with some success, but in hindsight he feels the treatment course was too short and quickly after discharge he started again washing and throwing things away. He could no longer work, and as a result he was put on sick leave.

In the 1980's, AIDS appeared and at that time it was a death sentence for anyone who caught it. Thus, for Nick, blood became his new great worry, dislodging radiation to a back seat. Life got increasingly difficult and even more so when the Chernobyl nuclear disaster happened. That brought back and strengthened his radiation fears. He tried to carry on working but soon found it impossible. His manager decided to give him a medical retirement and he returned back to the Maudsley hospital around the late 1980s and this time was offered Exposure Response Prevention (ERP). The treatment helped and life settled down a bit, but only for a very short time and the OCD quickly returned. In his own words, Nick said:

“I washed, had good days, bad days and very bad days, but life went on. The worry, the avoidance and the washing became part of it, there was no other way, it was my life, but there were good things too; my home life was happy. My partner was as always understanding and kind and my girls were growing up.”

Following discharge, Nick started working as a tour guide and that suited him very well. He took groups of people around London and became a guide lecturer. Throughout the 1990's and the decade following millennium he continued to struggle with his OCD. In 2010, after having battled OCD for almost seven decades, he saw his GP who explained to him that things had changed, in terms of treatment options, and this was for the first time Nick heard the words 'Cognitive Behavioural Treatment'. He was referred for therapy, and after having finished twelve sessions of CBT, Nick felt better and left the treatment feeling good and confident. Unfortunately, history repeated itself and he was quickly washing again. He said:

"I just started to slip back into my bad old ways; I was soon back at the sink, worrying, washing and all the other horrible things even though I knew it was wrong. I just wanted peace of mind; CBT might have been the way but I just could not do it."

Nick carried on for the next two years until he sought further CBT (12 sessions in total) in 2012 with a more experienced therapist. Nick found the treatment to be helpful but before he knew he had slipped back:

"I was on my own again - just me and the bully. I knew so well how strong he can be, convincing, persistent, always there, never missing a chance to get back in. He never forgets and he never sleeps. He sits on your shoulder and never goes away."

At this point in time it was decided to refer Nick to a clinic specializing in OCD treatment⁹.

Measures

As part of the intake session and treatment, a comprehensive battery of standardised and widely used self-report measures designed to assess different dimensions of OCD was administered. Further information about each measure and diagnostic tools are provided below.

Diagnostic Tools

Structured Clinical Interview for Diagnostic and Statistical Manual for DSM-IV Axis I Disorders (SCID; First et al., 1996) is a semi-structured, clinician administered interview for making major DSM-IV Axis I diagnoses. The interview schedule is divided into six self-contained modules which can be administered separately: mood-episodes; psychotic symptoms; psychotic disorders; mood disorders; substance use disorders; and anxiety, adjustment, and other disorders. Clinicians may customise each interview by administering only those modules of interest. The SCID is widely used both for research and clinical purposes and its psychometric properties have been reported to be excellent (First et al., 1996).

The Yale-Brown Obsessive Compulsive Scale (Y-BOCS; Goodman et al., 1989). This is a commonly used semi-structured interview-based rating scale designed to measure the severity and type of OCD symptoms. It consists of 19 items, but only items 1-10 are used to determine the total score. A score above 8 points suggests a mild OCD; a point above 15 suggests moderate OCD; a point above 23 suggest severe OCD; and a score between 32-40 suggests extreme OCD. The Y-BOCS has been found to have acceptable psychometric properties (Woody, Steketee, & Chambless, 1995).

⁹ Nick wanted his story and how he overcame his OCD appeared in the 2015 April issue of Compulsive Reading, a magazine published by OCD-UK a leading national charity, independently working with and for people affected by OCD.

Symptom Measures

The Obsessive Compulsive Inventory – Distress Scale (OCI; Foa et al., 1998) is a well established self-report measure within the OCD literature. It consists of 42 items, which can be used for OCD diagnostic screening, severity testing and symptom profiling. The scale composes of 7 subscales: washing, checking, doubting, ordering, obsessing, hoarding and mental neutralizing. Each item is rated using a 5-point Likert scale of symptom distress. A cut-off point of 40 and above suggests a diagnosis of OCD. The authors have reported good reliability and validity of the OCI both with clinical and non-clinical samples.

OCD Weekly Outcome Score (OCD-WOS; Salkovskis, unpublished) is a 4-item self-report measure, which has not been published. The scale's psychometrics has not been examined. The questionnaire asks respondents to rate (based on the last seven days): (i) how much time each day they have been occupied by their obsessions and/or compulsions (this item is graded from 0 hours to > 7 hours); (ii) how distressed they have felt; (iii) how much handicap the OCD has caused them; and (iv) levels of avoidance as a result of their obsessions and/or compulsions. Items 2-4 are graded on a 8-point scale from none/not at all (0) to extreme/always (8).

The Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001) is a 9-item self-report measure assessing symptoms of depression. Symptom severity is rated on a 0-3 point scale, over the last 2 weeks. As a severity measure, the PHQ-9 scores range from 0 to 27. According to the authors, a score of 10 (as a single screening cut-point) suggests that the person is suffering from clinically significant symptoms of depression. The internal reliability, factors structure, validity, and sensitivity to change have all been reported to be good (Cameron et al., 2008; Kroenke & Spitzer, 2002; Kroenke et al., 2001).

Generalised Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006) is a 7-item self-report questionnaire with good reliability and validity. Though designed primarily as a screening and severity measure for generalised anxiety disorder, it has also been found to be reasonably accurate in assessing for panic, social anxiety, and post-traumatic stress disorder (Kroenke et al., 2007). According to the authors a score above 8 suggests clinically significant anxiety symptoms. The scale has been found to have good reliability and validity (Löwe et al., 2008; Spitzer, Kroenke, Williams, & Löwe, 2006).

The Work and Social Adjustment Scale (WSAS; Mundt, Marks, Shear, & Greist, 2002) is a 5-item self-report measure. Each item is rated on a scale of 0 to 8, which can be pooled (total score 0 – 40; there is no clinical cut off, but higher scores denote more disability). It is meant to measure

the impact of a person's mental health difficulties on their ability to function in terms of work, home management, social leisure, and private leisure and personal or family relationships. Studies have shown that WSAS is reliable, valid and sensitive to change (Mataix-Cols et al., 2005; Mundt et al., 2002).

Responsibility Attitude Scale (RAS; Salkovskis et al., 2000) is a 26 item self-report measure designed to investigate general assumptions, attitudes and beliefs that people hold regarding responsibility. Items are scores on a 7-point scale ranging from 1 ("totally disagree") to 7 ("totally agree"). The coefficient alpha reliability of the scale as well as test-retest reliability have been found to be satisfactory. The scale has no clinical cut-off criteria and is mainly administered in treatment to monitor changes in inflated feelings of responsibility.

Responsibility Interpretations Questionnaire - Belief (RIQ-B; Salkovskis et al., 2000) is a 16-item self-report questionnaire, which was designed to assess the belief in specific interpretations of intrusive thoughts about harm as experienced by the respondent, based on their identification of specific intrusions. Thus, respondents are asked to write down their intrusions that they have had in the last two weeks followed by questions how much they believed various interpretations that are thought to be relevant to OCD beliefs. Each item is rated on a scale ranging from 0 ("I did not believe this idea at all") to 100 ("I was completely convinced this idea was true"). This scale has no clinical-cut off criteria but can be a valuable treatment tool for monitoring people's changes in unhelpful interpretations.

Daily Ratings of Excessive Reassurance Seeking, Anxiety, Urges and OCD belief

To examine whether the treatment would modify the participant's OCD beliefs, feelings of anxiety, urges to seek reassurance and the frequency of reassurance seeking, the following outcome variables were identified during the initial assessment:

- i. A count of how often reassurance was sought on that day (scale was provided ranging from 0 to 100).
- ii. A visual analogue scale consisting of a horizontal line (anchored with '*not at all*' at one end and '*extremely anxious*' at the other) of how anxious the participant had felt throughout the day.
- iii. A visual analogue scale consisting of a horizontal line (anchored with '*no urge*' at one end and '*extremely strong urge*' at the other) of the participant's perceived strength of his urge to seek reassurance throughout the day.

- iv. A visual analogue scale consisting of a horizontal line (anchored with '*not at all*' at one end and '*as much as possible*' at the other) of how strongly the participant believed his OCD belief on that day, i.e. "I am contaminated and unless I do something about it I will be on the road to death" (this belief was identified through extensive discussion and the precise wording was agreed with the participant).

This idiographic measure was administered on a daily basis during baseline measurement (21 days) and the whole duration of treatment and relapse prevention (291 days; 16 treatment sessions and 2 relapse sessions) apart from 7 days when the participant was on holiday. The participant was asked to fill in the measure for 1-2 weeks prior to attending the 1 month and 6 month follow-up appointments. The participant was given the forms in a paper format and instructed to fill it in every evening. On the form, there was a separate section where the participant could fill in how he had sought reassurance on that particular day. This particular section/item was not scored, and functioned more like a short diary note where the participant could reflect on and describe his experiences of OCD and reassurance seeking on that day. The instrument can be found in Appendix G.

Procedure

Given that excessive reassurance seeking had been identified to be a major part of the participant's OCD problem and something that had never been treated successfully, he was offered an appointment with the author of this thesis, due to his specialist interest and expertise in the area. The participant started treatment after 3 weeks of baseline measurements (21 data points). He was offered (and attended) 16 treatment sessions, 2 relapse prevention sessions and two follow-up appointments. The initial 6 sessions lasted for 1.5 hours and the remaining sessions were an hour long, meaning that in total he received approximately 21 hours of CBT treatment. The clinical contact was spread over 15 months. Each session was recorded using a digital audio and video recording device. As part of the treatment the participant was encouraged to listen to these recordings between sessions.

The treatment was administered by a certified clinical psychologist (BH) who has extensive experience in treating OCD using CBT. Regular supervision was provided by a senior clinician with expertise in treating OCD. The treatment was based on Salkovskis (1985) cognitive model of OCD and outlined in Salkovskis (1999). In summary, the treatment consisted of the following components (what follows is a description of Nick's case conceptualisation and his treatment with emphasis put on describing how his ERS was treated):

- Assessment and idiographic formulation
- Socialisation to the cognitive and behavioural model
- Goal setting
- Cognitive work on key OCD beliefs and reassurance seeking, including theory A versus theory B approach
- Repeated behavioural experiments aimed at testing out contamination fears and the effects of various behavioural responses (including excessive reassurance seeking)
- Reclaiming life following OCD
- Relapse prevention, including blueprint work and booster sessions

Case Conceptualization

Nick's case conceptualization/formulation was based on Salkovskis (1985) cognitive model of OCD. Although Nick had already received two courses of CBT, it was still thought to be helpful to start from the beginning, in the sense of re-formulating his problems using the cognitive model. Given the long history of his OCD problem and strongly held beliefs about contamination, emphasis was initially put on taking considerable time to help him (as well as the therapist) to understand why he tended to relapse following treatment, as well as making sense of his problem; discussing it and exploring other ways of looking at it.

The cognitive behavioural theory of the development of obsessional problems suggests that as a result of early (earlier) experience the individual develops particular assumptions. Some assumptions may be formed as a result of unusual or extreme events and be self-evidently problematic, while others may initially appear to be harmless or even helpful. These assumptions may include beliefs about harm, responsibility, and the nature and implications of intrusive thoughts themselves (Salkovskis et al., 2000). At some later time in the person's life, the occurrence of a particular critical incident (or series of such incidents) may activate the assumptions. In other words, the critical incident or situation fulfils the conditions inherent in the assumption (Salkovskis, Shafran, et al., 1999). For example, holding the belief 'thinking something inappropriate is as bad as doing it' is not necessarily pathological. However, the occurrence of an intrusive thought or impulse concerning something revolting and inappropriate would, for a person holding this belief, result in very negative appraisals and consequent efforts to undo such thoughts or prevent them from happening again (Salkovskis & Forrester, 2002). The risk is that these kinds of reactions pave the road for the development of OCD as described elsewhere (e.g., Salkovskis et al., 1998; Salkovskis, 1999).

When used to explain the development of Nick's OCD, the cognitive hypothesis (Salkovskis, 1985) suggests that Nick's past experiences and certain key life events lead to the formation of specific assumptions about diseases (e.g. AIDS), homosexuality, radiation and more. These were learned from a variety of sources (including the media) particularly during and after his teenage years and often coincided with historical events (e.g. threat of nuclear war, the AIDS epidemic). Some examples of Nick's OCD related assumptions were "It is better to be safe than sorry"; "I should always be careful"; "I should never cause even the slightest harm"; "If I know that harm is possible, I should always make sure to prevent it anyway I can"; "I should never take any unnecessary risk". When Nick came into contact with any sources of contamination (triggers), he most often interpreted this to mean that "he was contaminated and on the road to death unless he washed properly and took care of it". This interpretation, made him entirely focused on anything that could be contaminated (attention), and triggered a range of emotional reactions, such as strong feelings of fear and anxiety. The meaning, which Nick attached to the trigger, also drove him to engage in various behavioural reactions. These behavioural reactions included compulsive washing and excessive reassurance seeking from his partner (along with other common OCD related behaviours). His fears also resulted in other common safety-seeking behaviours, including rigorous avoidance, where he would, for example, avoid certain areas of London where he felt he risked life-threatening contamination.

Nick repeatedly engaged in obsessive handwashing and other cleaning rituals (e.g. long showers). When his contamination fears were particularly strong, Nick would get rid of his possessions (e.g. clothes, shoes, mobile phones, wallets) as he considered these objects to be dangerously polluted. On some occasions he would burn some of his possessions including his clothes or other valuables.

Cognitive Behavioural Therapy for OCD and Excessive Reassurance Seeking

Nick was seen for twenty sessions. They were divided into six different phases, i.e. baseline (A), three treatment phases (B¹; B¹B²; B¹B²B³), relapse prevention (C), and follow-up (A). Each phase was as follows:

- **Baseline measurement (A)** – following initial assessment baseline measurements were taken over 21 days.
- **First treatment phase (B¹)** – This includes the first four treatment sessions which focused on 'making sense' of Nick's presenting problem, in particular helping him to understand how his OCD was maintained and exploring why he had relapsed following his previous CBT

treatment courses. This involved drawing out his idiographic formulation, which depicted all his maintenance factors and Nick was helped to approach his OCD problem from a different perspective (theory A versus theory B). So far, Nick had believed that his 'enemy' was contamination or germs (theory A); when, in fact, the problem was that he was 'someone who took great care of cleanliness and was over-careful and over-worried about being contaminated and therefore when he came into contact with something he did not like he felt that he was contaminated and needed to wash to become clean and prevent harm' (theory B). During this phase, Nick's 'use' of excessive reassurance seeking was also explored and it was identified as an important maintenance factor. Nick mainly sought reassurance from his wife. In any given situation, Nick would usually ask repeatedly for reassurance, i.e. asking for it once was usually not enough. According to Nick, his ERS was causing problems in his relationship, such as arguments and he described his partner as being "fed up" and frustrated with his ERS. Nick said that he found it very hard to refrain from seeking reassurance and felt unable to cope without it. During this phase, Nick was helped to understand, using the theory A/B approach how seeking reassurance, as well as other compulsions (e.g. compulsive washing), were unhelpful and served to maintain his problem.

- **Second treatment phase (B¹B²)** – This includes treatment sessions 5 to 9. During this phase, Nick started to challenge his contamination fears within the context of behavioural experiments. This involved getting Nick to actively contaminate himself and simultaneously refrain from engaging in compulsions, in particular compulsive washing. For obvious reasons, Nick found this particularly difficult. Thus, during the initial stages the therapist modelled many of these experiments with the intention to help Nick to approach his fears on his own when he felt he could do that. Gradually, these experiments became more challenging; Nick took more responsibility in devising them and they moved from 'in-session experiments' to experiments done in areas of London or at places (e.g. hospitals) that Nick found particularly dangerous.
- **Third treatment phase (B¹B²B³)** – This includes treatment sessions 10 to 15. So far, emphasis had been put on treating Nick's compulsive washing behaviours, which at the start of treatment was interfering greatly with his life and taking up a lot of his time. During this phase, other compulsions, in particular excessive reassurance seeking, received increasingly more treatment attention. With regards to ERS specifically, this phase of intervention began with extensive discussion of the way in which ERS was different from other compulsions due to its interpersonal processes. Using the theory A/B framework Nick

was helped to examine how ERS was both unhelpful and unnecessary. He was introduced to the idea engaging in support seeking instead of reassurance. He was encouraged to test out the effects of dealing with situations on his own without asking for reassurance but if he wanted to ask for reassurance he was to try to approach support instead. Nick's partner took more part in the treatment at this stage and she was invited to therapy sessions (and took part in homevisits) where the intervention of shifting from reassurance seeking to support seeking was discussed extensively and practiced. This was then followed up with telephone calls between sessions where the therapist spoke with Nick and his partner about this specific intervention.

- **Relapse prevention (C)** – After 16 sessions of treatment the relapse prevention phase began. During sessions 16 to 18, Nick was helped to write up a 'blueprint', which summarises everything he had learnt in treatment and set up a plan (in writing) of what he could do if the OCD got worse again. It should be acknowledged that behavioural experiments were a 'red thread' throughout treatment - even during the relapse prevention phase – where Nick continued to set himself bigger targets to challenge his fears. This included travelling abroad and re-connecting with an old friend, some of which he had been avoiding for many years.
- **Follow-up / Return to baseline (A)** – Having completed 18 sessions of treatment (and relapse prevention) the treatment ended. Nick was seen 1 and 6 months after the close of the treatment intervention for an assessment.

Data Analysis

Due to the large amount of data points weekly moving average values were calculated. Data were displayed graphically for the data evaluation, which consisted of visual inspection of means, trends (slope), and variability between phases. It should be noted that because the moving average is the average of 7 days it was not possible to calculate the moving average for the first week of baseline as there were not enough previous data points although these points are obviously incorporated into the first data point shown.

Results

Clinical Questionnaires

Table 12 shows Nick's outcome scores on the symptom and diagnostic measures from the initial assessment until the end of clinical contact. Nick's score on the clinician rated Yale-Brown Obsessive Compulsive Scale (Y-BOCS) suggest that Nick was suffering from severe OCD at the start

of treatment. By his last treatment sessions his score fell below the clinical cut-off of 8 and that progress was maintained both at 1 and 6 month follow-up. The same pattern emerges when we examine Nick's scores on the Obsessive Compulsive Inventory (OCI); at the start of treatment his scores (59 points) were above the clinical cut-off of 40 points and at the end of treatment he scored 12 points and at the 6-month follow-up his scores had reduced to 10 points. The Obsessive Compulsive Disorder-Weekly Outcome Measure (OCD-WOS) gives insight into the time Nick spent engaging in compulsions and obsessions at the beginning of therapy and throughout treatment and follow-up. At the beginning of treatment, Nick was occupied for about 6-7 hours (sometimes over 7 hours) each day by his obsessions and compulsions. From session 17, this figure dropped to 0 and remained so during follow-up. In terms of depression and more general ratings of anxiety, Nick's score on the Patient Health Questionnaire (PHQ-9) never reached clinical cut-off for depression. His scores on the Generalized Anxiety Disorder (GAD-7) questionnaire at the start of treatment indicated that he was suffering from moderate anxiety; from treatment session 10 and onwards he scored below the clinical cut-off point of 10. Nick's score on the Work and Social Adjustment Scale (WASA) reduced from 2 points to 0 at both 1-month and 6-month follow-up. Finally, Nick's responsibility ratings on the Responsibility Attitude Scale (RAS) dropped from 126 to 71 at the 6-month follow up, indicating positive changes in inflated responsibility levels. His scores on the Responsibility Interpretations Questionnaire (RIQ) also dropped significantly from 68 to 4 points at 1-month follow-up and he scored 1 point on the same scale at 6-month follow-up.

Table 12. Participant's scores on clinical measures

	Baseline (Assessment) A	Phase 1 Treatment sessions 1-4 B ¹				Phase 2 Treatment sessions 5-9 B ¹ B ²					Phase 3 Treatment sessions 10-15 B ¹ B ² B ³						Relapse prevention 16-18 C			Follow up Month A	
Measures		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	1	6
Y-BOCS	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	5
OCI	58	59	83	-	-	-	60	55	49	50	49	23	10	24	24	32	22	11	12	10	10
OCD – WOS																					
Time (hrs)	5-6	5-6	>7	>7	3-4	5-6	1-2	2-3	1-2	1-2	0-1	1-2	0-1	0-1	0-1	-	-	0	0	0	0
Distress	8/8	8/8	8/8	6/8	6/8	8/8	6/8	5/8	6/8	6/8	4/8	3/8	2/8	2/8	2/8	-	-	1/8	1/8	1/8	1/8
Handicap	6/8	6/8	6/8	6/8	4/8	5/8	5/8	1/8	4/8	2/8	2/8	0/8	0/8	2/8	2/8	-	-	0/8	0/8	0/8	0/8
Avoidance	8/8	8/8	8/8	8/8	6/8	6/8	6/8	6/8	4/8	2/8	4/8	1/8	2/8	4/8	3/8	-	-	0/8	0/8	0/8	0/8
PHQ-9	6	6	6	7	8	3	5	3	2	2	3	0	1	2	2	2	0	0	0	0	0
GAD-7	12	12	13	10	14	11	12	6	8	10	5	3	1	3	3	3	3	0	3	0	0
WSAS	2	2	8	8	4	2	5	2	1	2	2	4	1	0	1	0	0	0	0	0	0
RAS	126	-	-	-	-	-	-	120	-	-	-	-	-	-	90	-	-	-	-	112	72
RIQ	68	-	-	-	-	-	-	23	-	-	-	-	-	-	13	-	-	-	-	4	1

Note: SCID, Structured Clinical Interview for Diagnostic and Statistical Manual for DSM-IV Axis I Disorders; Y-BOCS, Yale-Brown Obsessive Compulsive Scale; OCI, Obsessive Compulsive Inventory; OCD – WOS: OCD Weekly Outcome Score; PHQ-9, Patient Health Questionnaire-9; GAD-7, Generalized Anxiety Disorder-7; RAS, Responsibility Attitude Scale; RIQ, Responsibility Interpretations Questionnaire.

Daily Ratings of Excessive Reassurance Seeking, Anxiety, Urges and OCD Belief –

Visual Inspection

Figures 10-13 depict the patterns of the daily visual analogue scale ratings for the frequency of reassurance seeking (Figure 10), feelings of anxiety (Figure 11), urges to seek reassurance (Figure 12), and the main OCD belief that was tackled in therapy (Figure 13). The first treatment phase (Tx Phase 1) focused on ‘making sense of the problem’ by developing an idiographic formulation and introducing to Nick the idea of approaching his OCD problem using theory A versus theory B framework. By comparing the average ratings across the Baseline phase (represented in black dotted lines) with the first treatment phase (Tx Phase 1) we see an increase in three variables (feelings of anxiety, urges to seek reassurance and OCD belief) while the average frequency of the behaviour stays relatively the same between these two phases.

During the second phase of treatment (Tx Phase 2), Nick was helped to confront his fears using (gradually more intensive) behavioural experiments. Visual inspection shows a substantial change in rating for all variables between treatment session 5 and 6 and ratings continue to come down for all variables during the remaining treatment sessions.

Treatment phase 3 (Tx Phase 3) marks the beginning for when the treatment focus was directed more on treating Nick’s excessive reassurance seeking. Again, we can see the same pattern for all variables, that is, scores become gradually lower and scores continue to come down throughout the relapse prevention phase (Tx Phase 4).

It should be noted that the sharp increases in ratings on all variables, which take place in phase 3, 4, and the relapse prevention phase coincide with particularly challenging behavioural experiments, which were set up with Nick (or he decided to do himself). As an example, this involved going to places he had avoided for a very long time in his life due to his contamination fears or being around certain people he considered contaminated. Finally, all treatment effects were maintained at 1 and 6-month follow-up.

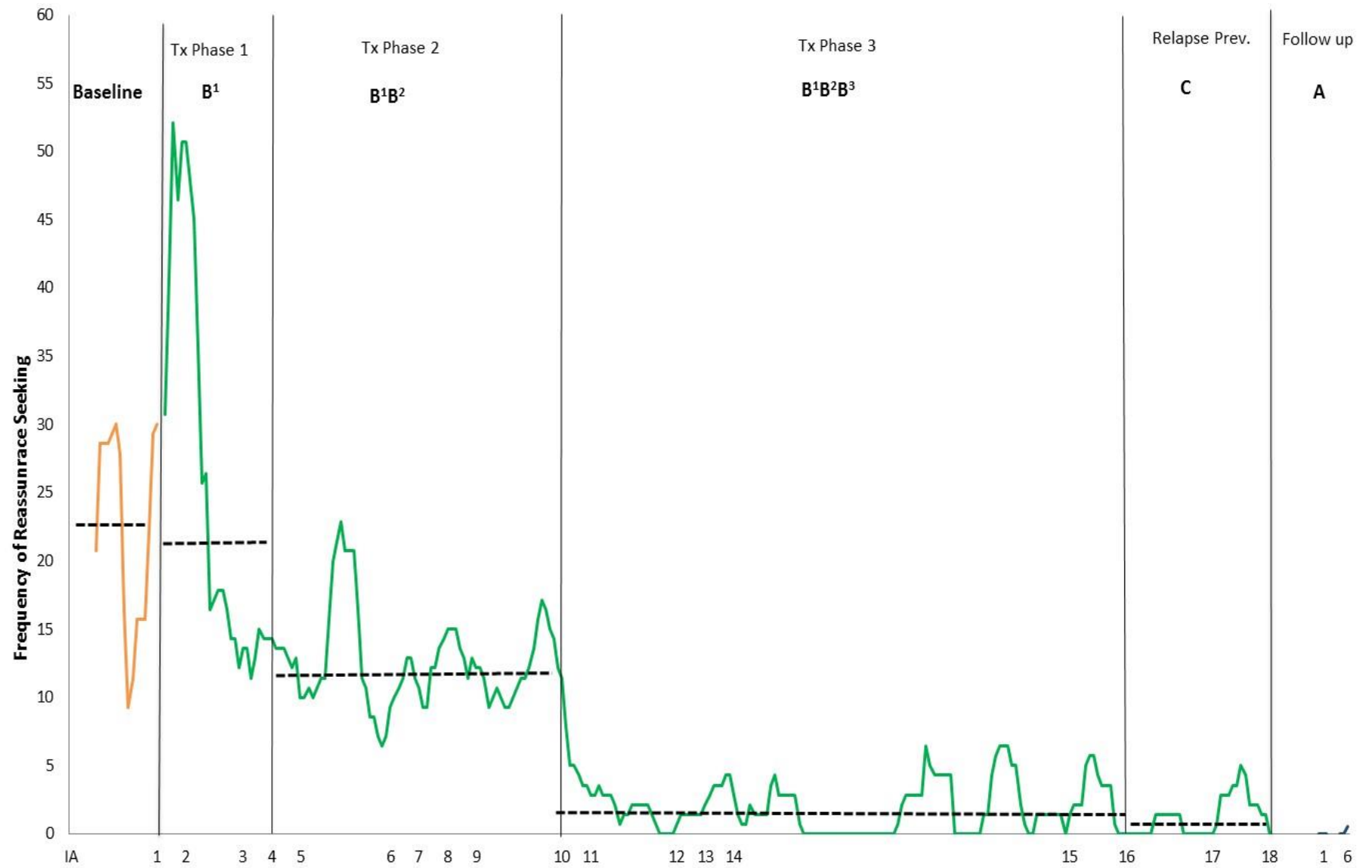


Figure 10. The frequency of reassurance seeking throughout the intervention

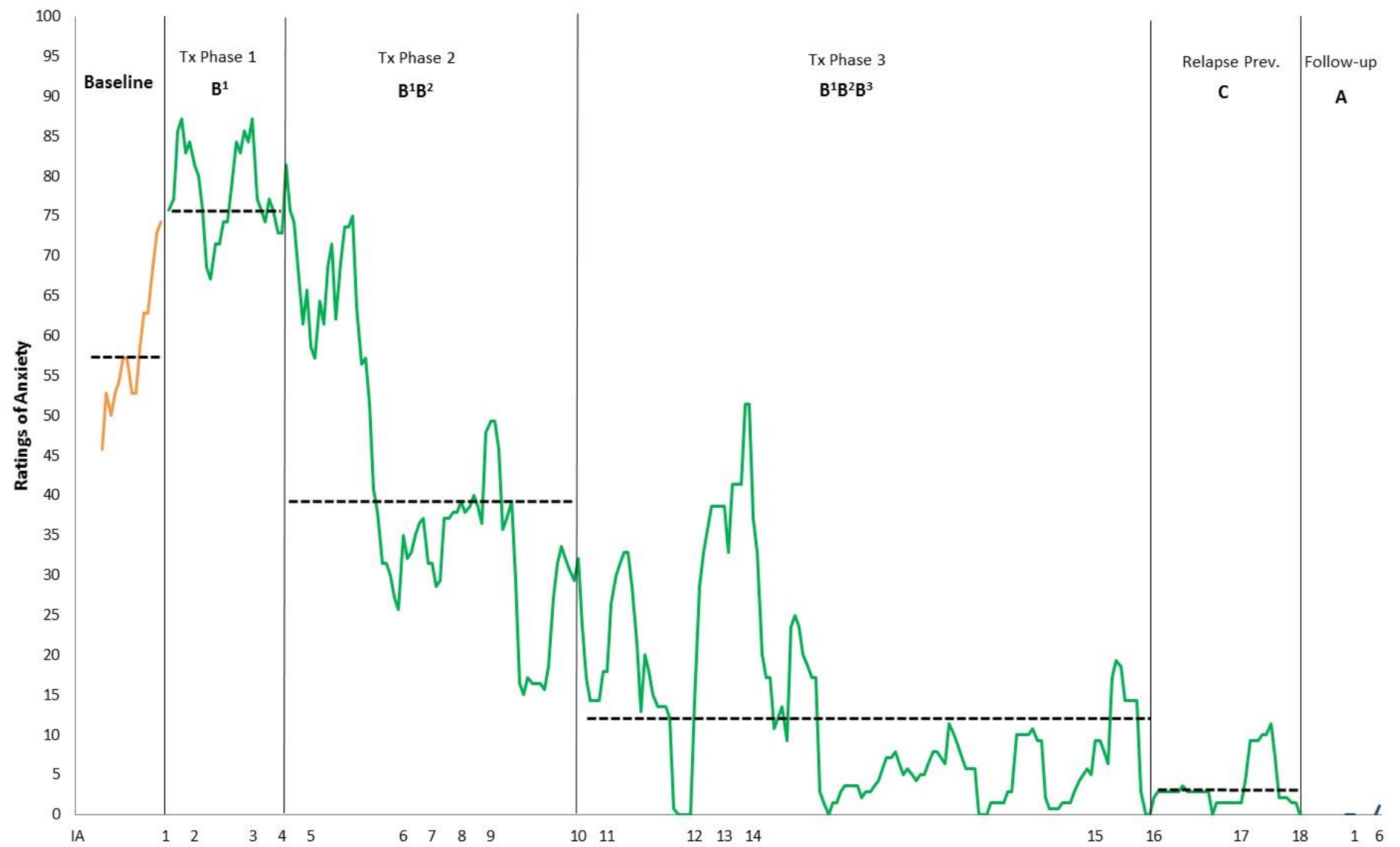


Figure 11. The ratings of anxiety throughout the intervention

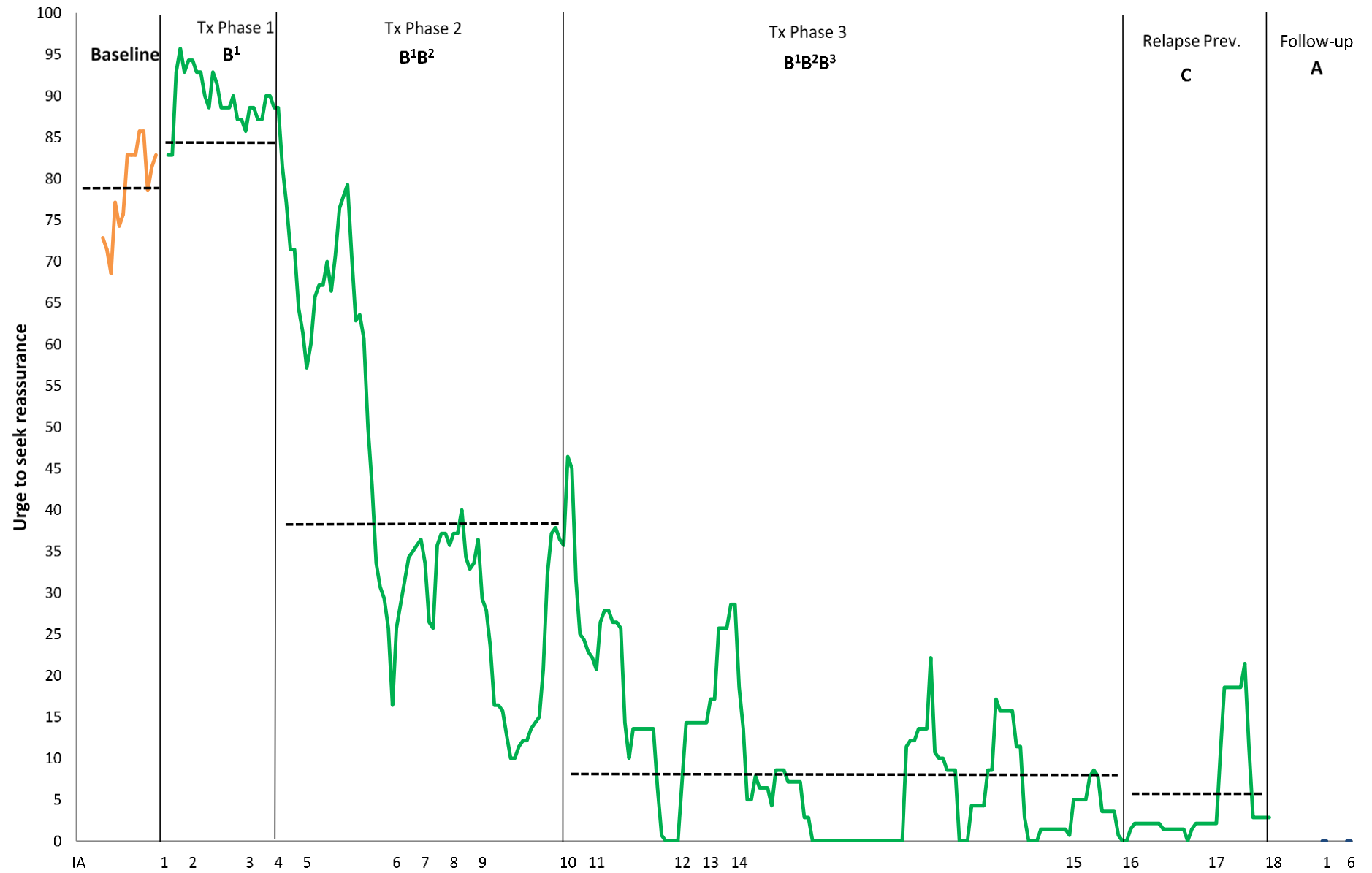


Figure 12. The urges to seek reassurance throughout the intervention

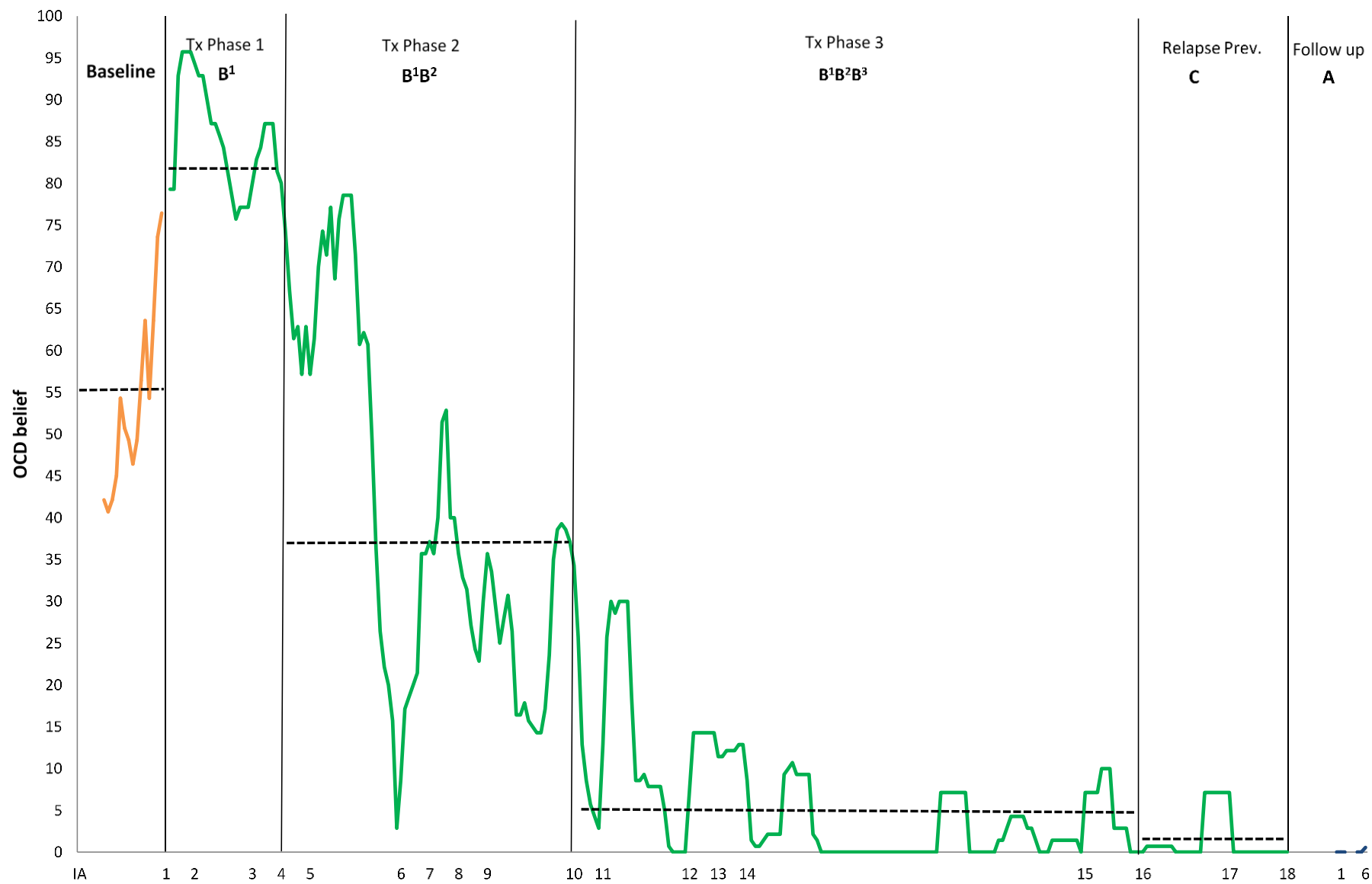


Figure 13. The main OCD belief throughout the intervention

Discussion

The aim of this study was to establish effectiveness of cognitive behavioural treatment (CBT) in reducing symptoms of OCD including debilitating levels of reassurance seeking in a case where the problems are longstanding and CBT has previously been undertaken (within the last 3-4 years). However, these two previous treatment episodes have one thing in common; there was no specific focus on treating the participant's excessive reassurance seeking although it was one of the main presenting problems. A single case experimental design was applied which consisted of a baseline phase, an intervention phase, relapse prevention phase and two follow-up measurements. The results suggest that OCD and excessive reassurance seeking can be treated using CBT based on Salkovskis (1985, 1999) cognitive model of OCD and by helping the sufferer to shift from seeking reassurance to seeking support, even in severe and long-standing cases of OCD.

The treatment was split into several phases. The first phase focused on making sense of the participant's problem using standard CBT techniques, such as developing an idiographic formulation of how the problem developed and was maintained. This involved helping the participant to test out how various reactions of his, such as seeking reassurance, were not a solution to his OCD problem but the opposite. Reflecting on the treatment, the participant said that he found the time that was spent on drawing out his idiographic formulation and particularly the work on theory A versus B to be particularly helpful. Although this had been done in previous treatments, he felt that the phrasing of theory B, which suggested that he was suffering from a worry problem but not a contamination problem, was an eye opener; a realization. Having achieved a clear understanding of how his OCD was maintained, paved the way for the second phase of the treatment which focused on doing a range of behavioural experiments with the aim of challenging his beliefs by gathering information about how the 'world really works'. With increasingly more challenging behavioural experiments, the participant gradually started to feel differently about his problem. The most 'powerful' experiments involved deliberate contamination and delayed washing, sometimes over few days, to test out his predictions, which helped him to learn that his fears did not come true and that washing away his OCD was impossible.

With regards to excessive reassurance seeking, the initial treatment intervention simply focused on making sense of the behaviour within the context of a vicious flower (formulation) where the participant was helped to explore the short-term versus long-term effects of ERS on his OCD. As with other rituals, he was helped to understand how ERS maintained his problem and prevented him from overcoming his OCD. Helping the participant to make the shift from seeking reassurance to seeking support was not specifically introduced until halfway through treatment, simply because his washing and other cleaning rituals were given priority. Interestingly, the frequency of

the behaviour had already dropped quite significantly (as well as all other ratings) before this intervention was specifically implemented. Reflecting on this change in ratings, the participant said that the formulation and behavioural experiments had taught him that although his washing rituals made him feel less anxious in the short-term it strengthened his OCD and this learning was generalized across other compulsions so he felt less motivated to seek reassurance. However, we know from clinical experience that low levels of reassurance seeking can equally maintain OCD problems and that certainly applied to this case. Thus, the participant was helped to make the shift from reassurance seeking to support seeking. During this part of the treatment, it was particularly helpful to involve the participant's partner in some of the treatment sessions to discuss (and practice) how this could be applied. Due to lack of control over the experimental conditions, one can only speculate whether this intervention explains the further decrease in the frequency of reassurance seeking, feelings of anxiety, urges to seek reassurance and OCD belief.

Study Limitations

The main strength of the study is the number of data points that were collected which give very detailed information about the participant's progress throughout the course of treatment and during different intervention phases. Single case experimental designs can provide very valuable information, which can guide further research and treatment development, but have limitations. Firstly, it is not clear how well effects will generalise. Secondly, several variables are being manipulated in each treatment session. Thus it is difficult to judge how or if certain interventions were having an effect on the variables under investigation. In addition, a measure of support seeking was not included, so this aspect depends on verbal feedback about whether the participant engaged in support seeking after it was introduced as a substitute for reassurance.

A consecutive case series would be the obvious way of taking this forward. For example, it would be interesting to compare the effects of exposure response prevention (ERP) accompanied by a traditional habituation rationale with the effects of ERP delivered with a cognitive rationale (ERP-CR) where the participants are encouraged to either a) drop ERS or b) make the transition from reassurance seeking to support seeking. This is markedly different from the exposure interventions as conducted in traditional ERP because the ERP-CR condition is presented within an explicit framework that shifts participants to cognitive processing of the validity of their beliefs about reassurance seeking. Another possibility is to introduce the interventions to both groups as a crossover.

In summary, this clinical example illustrates how CBT can be successfully applied to treat long standing OCD and excessive reassurance seeking in an older adult who had been suffering from OCD all his life. The client had recently received two standard courses of CBT but soon after

discharge relapsed. Those treatments were different from the one presented here on three main factors. Firstly, this treatment used a different approach to phrasing theory A/B; secondly, the behavioural experiments where the client was asked to contaminate and challenge his beliefs were much more challenging; and finally, emphasis was put on treating excessive reassurance seeking specifically. It is difficult to judge if only one or all of those factors mattered. What these results obviously call for are further studies who control better for these different factors.

Chapter 7:

The Nature and Assessment of Excessive Reassurance Seeking: A Psychometric Analysis

In order to pursue research into the transdiagnostic and diagnosis specific factors of Excessive Reassurance Seeking (ERS) a reliable and valid measure is required. Within the context of anxiety research, most previous questionnaires have focused on measuring ERS within a single emotional problem, such as health anxiety (e.g., Longley, Watson, & Noyes Jr, 2005; Lucock & Morley, 1996; Speckens, Spinhoven, Van Hemert, & Bolk, 2000). More recently Rector, Kamkar, Cassin, Ayearst, and Laposa (2011) published the Reassurance Seeking Scale (RSS), which was developed to examine the function of ERS transdiagnostically. The RSS is a 30 item self-report measure that was standardized using a sample of patients suffering from OCD, GAD, panic disorder or social phobia. The questionnaire items were theoretically derived and loaded onto three factors: (i) indecisiveness in making decisions; (ii) social attachment and the security of relationships; and (iii) perceived threat and the ability to cope with anxiety. Psychometric properties of the scale were appropriate; it was found to possess good internal consistency, and the subscales were positively and moderately correlated with measures of anxiety, stress and depression (Rector et al., 2011). Although the psychometric properties of the questionnaire were promising, it has been criticised for lacking in specificity (Kobori & Salkovskis, 2013), i.e. the questionnaire appears not to identify shared and distinguished mechanisms of ERS when compared across different emotional problems.

Cogle and colleagues (2012) developed an 8-item measure of excessive reassurance seeking. They named the scale, the Threat-related Reassurance Seeking Scale (TRSS), and intended it to assess reassurance seeking related to (i) general threats (e.g. reassurance from others that negative outcomes will not occur) and (ii) threats of negative evaluation (e.g. reassurance that others do not think negatively of him/her). When examining the relations between ERS and anxiety pathology, the authors demonstrated (in a student sample) that the TRSS was correlated with greater symptoms of OCD, GAD and social phobia even after controlling for trait anxiety, depression and intolerance of uncertainty. Further analysis revealed that general threat related ERS as opposed to negative evaluation ERS was uniquely associated with anxiety symptoms. Interestingly, the study did not reveal any diagnostic specificity for the anxiety disorders in relation to ERS. Although the RSS and TRSS seem to be measuring various important aspects of excessive reassurance seeking in particular triggers and motivation, they have been criticised (Kobori & Salkovskis, 2013) for not tapping into other (potentially important) aspects of the behaviour, such as, how people engage in reassurance seeking, how frequently they seek it, what the process involves, and the potential negative consequences of the behaviour.

Kobori and Salkovskis (2012) developed a self-report measure for ERS, the Reassurance Seeking Questionnaire (ReSQ), which (in comparison to the TRSS and the RSS) offers a much broader assessment of the different aspects of ERS. The questionnaire built largely upon a preceding qualitative study where the authors interviewed ten OCD patients about their experiences and understanding of ERS (Kobori et al., 2012). The ReSQ consists of 65 items, divided into four subscales. There is also a separate section aimed at assessing emotional reactions to ERS, i.e. respondents are asked to rate how they feel when they obtain versus not obtain reassurance. The four subscales assess: (i) which source the respondent seeks reassurance from; (ii) how much they trust the source; (iii) frequency of the behaviour; and (iv) how careful the respondent becomes when they approach reassurance. The authors demonstrated that the ReSQ has satisfactory validity (in terms of factorial- and concurrent validities) and reliability (see further Kobori & Salkovskis, 2013). The authors used the instrument to identify the degree to which reassurance is specific to OCD as opposed to panic disorder and healthy controls. The group comparisons suggested some diagnostic specificity, but quite surprisingly they mostly found shared aspects (transdiagnostic) of ERS across disorders (OCD and panic disorder). In terms of specificity, individuals with OCD rated themselves as more worried about the negative interpersonal effects of ERS. They also tended to seek reassurance more intensely and the amount of effort they put into reassurance seeking was also more, for example, they reported listening very closely to what was being said to them during the provision of reassurance, and examined the 'reassurer' in detail – sometimes asking others to repeat their reassurance. The OCD sufferers also engaged more frequently in self-reassurance in comparison with the other two groups. Perhaps the most interesting finding from this study is the lack of specificity of ERS to OCD (Kobori & Salkovskis, 2013). However, although the results indicated that some of the questionnaire subscales differentiated reassurance symptomatically, it seems that the overall specificity of the questionnaire was somewhat less than expected. This may be interpreted in various ways. This could of course mean that ERS in panic disorder and OCD are more similar than previously thought. Alternatively, the questionnaire might be at fault. Based on clinical experience, the latter seems more likely.

Study aims

Research and clinical experience clearly suggests that excessive reassurance seeking is a behaviour that features across many different anxiety disorders. What continues to be elusive is an understanding of shared and specific components of ERS across anxiety problems. This is an important question as it directly impacts on how reassurance is currently managed or incorporated into psychological treatments.

To increase our understanding of the function of ERS and the various mechanisms involved the author has sought to develop and refine a scale that taps into the various aspects of this complicated behaviour, including both things that can be considered “core” to the experience of reassurance seeking and the provision of reassurance and factors which are more “downstream” or an effect of such behaviour. However, we also need to identify the extent to which particular factors are shared and not shared across OCD and health anxiety as opposed to other anxiety problems. Given that the questionnaire (ReSQ) that was developed by Kobori and Salkovskis (2013) was capable of identifying some diagnosis specificity, this was taken as the starting point. The present study thus was intended to investigate the shared and diagnosis specific factors that have been identified in earlier studies and begin to make sense of them in terms of psychological constructs, and to examine (and identify) factors that have so far received limited research attention. This study builds upon Kobori and Salkovskis (2013) questionnaire study, and the studies presented earlier in this thesis, by using a newly and specifically developed measure of excessive reassurance seeking - the Reassurance Seeking Questionnaire (RSQ). The RSQ (along with other questionnaires assessing both general and specific psychopathology) was administered to participants experiencing a range of anxiety problems, and healthy controls as a benchmark. The three specific aims were:

- i. To continue the development of a questionnaire to assess the various aspects which are related to ERS in anxiety disorders (including how people seek reassurance, how often, what motivates them to do it, what are the consequences on their emotional state and relationships with other people).
- ii. Identify the degree to which ERS is specific to OCD as opposed to health anxiety, and identify the degree which the concept is specific to both OCD and health anxiety as opposed to other anxiety disorders.
- iii. Identify the core factors of ERS that are specific to OCD and health anxiety as opposed to other anxiety problems, and also more general factors (or downstream effects) seen across all anxiety problems.

Hypothesis

It was hypothesised that:

- All three clinical groups would demonstrate higher scores on the RSQ in comparison with the healthy volunteers.
- The OCD and health anxious groups would demonstrate a higher score on the RSQ in comparison with the anxious controls group.

- The core factors of excessive reassurance seeking would be relevant across all anxiety disorders but to a stronger degree in people suffering from OCD or health anxiety in comparison with the anxious controls group.
- The “downstream” effects of excessive reassurance seeking (non-core factors) would be relevant across all anxiety disorders but to a lesser degree in the anxious controls group in comparison to the OCD and health anxiety groups.
- Excessive reassurance seeking in OCD will be different from that in health anxiety in terms of the frequency of the behaviour, who they seek reassurance from and for what reasons.

Method

Design

In a cross-sectional study, people suffering from OCD, Health Anxiety and other anxiety problems (panic disorder, social phobia, generalized anxiety disorder; Anxious Control group) completed a new measure of reassurance seeking. Results were compared between the groups and healthy controls were drawn from the community in order to provide a benchmark.

Participants

Clinical population

To be eligible for the study, participants had to be over 18 years of age. Participants had to be able to understand sufficient English, be literate, not having learning or communication difficulties. The clinical group participants consisted of three groups: (i) 66 individuals whose symptoms met criteria for Obsessive Compulsive Disorder according to DSM-IV and who were not currently experiencing hypochondriasis (health anxiety) (OCD group); (ii) 36 individuals whose symptoms met criteria for hypochondriasis (health anxiety) according to DSM-IV and who did not suffer with OCD (HA group); (iii) 42 individuals whose symptoms met criteria for a principal diagnosis of Panic Disorder with/without agoraphobia, Social Phobia, or Generalized Anxiety Disorder according to DSM-IV and who did not suffer with OCD or hypochondriasis (Anxious Controls group; AC group). All clinical group participants were assessed using the Structured Clinical Interview for Diagnostic and Statistical Manual for DSM-IV Axis I Disorders (SCID; First et al., 1996). Clinical participants were recruited through NHS trusts, mental health charities, and self-help organisations or through advertisements in magazines/papers. They were excluded from the study if they met diagnostic criteria for bipolar or psychotic disorders, comorbid OCD and hypochondriasis (health anxiety), specific phobia, post-traumatic stress disorder, autism spectrum disorders or current alcohol and/or substance misuse.

Healthy Controls

Non-clinical participants (HC group) were volunteers recruited from the community and they consisted of 78 participants. Healthy controls did not go through as rigorous assessment as the clinical groups; participants were excluded from the HC group if their scores *on any* of the clinical questionnaires were above the ‘clinical cut-off’ – this was taken as evidence that they were currently suffering from a psychological problem. More precisely, participants had to score no more than 10 points on the PHQ-9; not higher than 8 on the GAD-7; below 30 on the OCI and below 15 on the HAI.

Materials

Reassurance Seeking Measure

The Reassurance Seeking Questionnaire (RSQ) was devised specifically for this study, in order to examine various aspects of excessive reassurance seeking across different anxiety problems. The RSQ consists of 35 items which are scored on a scale that is graded from Never (0), Rarely (1), Sometimes (2), Often (3), Very often (4) to Always (5). The 35 items are split into 8 *a priori* theoretically derived subscales. Four subscales were developed to tap into the ‘core’ features of excessive reassurance seeking, i.e. features which are thought to be central to the concept, which focus on specific and unique aspects of the behaviour that are more relevant to OCD and health anxiety as opposed to other anxiety problems. These four subscales were largely built upon previous research, in particular Kobori and Salkovskis (2013), but also incorporated the findings presented in previous chapters of this thesis (e.g. motivational factors and interpersonal processes). They were:

- i. *Source of reassurance*: This subscale consists of four items aimed to access how frequently people seek reassurance directly from other people (e.g. “I ask for reassurance from my family”; “I ask for reassurance from people I know”).
- ii. *Motivational factors*: This subscale consists of eight items and was designed to tap into peoples’ intentions when they seek reassurance, i.e. what motivates them to seek reassurance - what are they hoping to achieve? Various motivational factors were included. To name some examples, some focused on emotional change (e.g. “I believe that my anxiety will not go down until I get reassurance”); others on interpersonal effects (e.g. “When I seek reassurance it brings me closer to the other person”); and some on responsibility beliefs (e.g. “When I seek reassurance I feel it reduces the burden of responsibility”); or ‘just right feelings’ (e.g. “If possible, I will continue to seek reassurance until I feel ‘just right’”); or changes in worries about health (e.g. “I seek reassurance to make sure there is nothing wrong with my health”).

- iii. *How reassurance is sought*: This subscale consists of seven items and is aimed at identifying how people seek reassurance, i.e. what needs to happen to make them feel reassured (e.g. “I ask others to do things as a way of reassurance me”; “When I seek reassurance I repeat what the person says so that they can confirm it”; “If I do not get reassurance in the ‘right way’ I seek it until I get it”).
- iv. *Process of reassurance seeking*: This subscale consists of four items that are meant to tap into peoples’ difficulties in resisting the urge to seek reassurance (“I find it hard to resist seeking reassurance”) even when they realize that their requests frustrate other people (“I seek reassurance from other people even when I can see that it frustrates them”). It also measures other aspects of frustration, such as how frequently people experience this negative feeling as part of the whole process, i.e. reassurance seeking and reassurance provision (e.g. “At the time I seek reassurance it makes me feel frustrated”).

The remaining four subscales were considered to be closely related to the phenomenon of excessive reassurance seeking, but more downstream and focus more on the effects of seeking reassurance excessively. These more general features are thought to be elevated in people who suffer from anxiety problems but not necessarily specific to OCD and health anxiety. These four subscales were:

- i. *Interpersonal care*: This subscale consists of four items and asks how frequently people avoid seeking reassurance because they understand it frustrates other people (e.g. “I avoid asking for reassurance because I know it frustrates other people”) or if there is anything they do to compensate for their behaviour or make the ‘reassurer’ feel better (and more likely) for providing them with reassurance (e.g. “I show my appreciation, e.g. say ‘thank you’, to make the person comfortable with giving reassurance”).
- ii. *Post reassurance affect*: This subscale consists of two items that ask about feelings of guilt (“After I have sought reassurance I feel guilty”) and frustration (“After I have sought reassurance I feel frustrated”) as a result of seeking reassurance.
- iii. *Negative Interpersonal Effect*: This subscale consists of four items. They focus on identifying various negative interpersonal effects, which are thought to be associated with excessive reassurance seeking (e.g. “My reassurance seeking puts strain on other people”; “People feel frustrated when I seek reassurance from them”).
- iv. *Insight about the negative effects of reassurance seeking*: This subscale consists of two items that tap into peoples’ understanding of how seeking reassurance can be counter-productive for them (e.g. “I feel that seeking reassurance can make my problems worse”).

Of the 35 items, 13 were directly taken from the ReSQ measure (Kobori & Salkovskis, 2013). These 14 items were chosen because according to the author's analysis they differentiated best between participants suffering from OCD as opposed to panic disorder (P. Salkovskis, personal communication, 01. September, 2013). The remaining 22 items were drawn from clinical experience, existing theory, and most importantly from the findings, which were presented in the earlier chapters of this thesis. These items were thought to be both important and (some) specific for the assessment of ERS in OCD and health anxiety as opposed to other anxiety problems. As an example, questions about frustration, 'just right feelings' and the people's perceived positive interpersonal effects of ERS were incorporated.

During the developmental stage of the questionnaire a comprehensive list of items was generated which was discussed amongst members of the research team until a preliminary version of the questionnaire was completed which was then piloted with individuals with personal experience of anxiety problems and with people with no history of mental health problems.

The Reassurance Seeking Questionnaire can be found in Appendix H.

Diagnostic Evaluation

Structured Clinical Interview for Diagnostic and Statistical Manual for DSM-IV Axis I Disorders (SCID; First et al., 1996) is a semi-structured, clinician administered interview for making major DSM-IV Axis I diagnoses. The interview schedule is divided into six self-contained modules which can be administered separately: mood-episodes; psychotic symptoms; psychotic disorders; mood disorders; substance use disorders; and anxiety, adjustment, and other disorders. Clinicians may customise each interview by administering only those modules of interest. The SCID is widely used both for research and clinical purposes and its psychometric properties have been reported to be excellent (First et al., 1996).

Symptom Measures

Beck Anxiety Inventory (BAI; Beck, Epstein, et al., 1988) is a 21-item self-report inventory for measuring the severity of anxiety. It is typically considered the gold standard self-report measure of general anxiety symptoms. It was designed to assess anxiety severity among adults and is intended to distinguish anxiety from depression. Scores of 0-7 reflect minimal anxiety, 8-15 mild anxiety, 16-25 moderate anxiety, and scores above 26 indicate severe anxiety. The BAI has received strong empirical support although it has been criticized for being mostly focused on physical symptoms of anxiety.

Beck Depression Inventory (BDI; Beck & Steer, 1987) is 21-item self-report inventory, rated on a 4-point scale, intended to measure the severity of depression. Scores of 0-9 indicate minimal depression, 10-18 mild depression, 19-29 moderate depression, and 30-63 severe depression. The

BDI is widely used and its internal consistency is good although its test-retest reliability is poor (Beck, Steer, et al., 1988). Although it was not specifically developed as a diagnostic tool it is generally accepted as a useful tool in diagnosing depression.

The Obsessive Compulsive Inventory – Distress Scale (OCI; Foa et al., 1998) is a well established self-report measure within the OCD literature. It consists of 42 items which can be used for OCD diagnostic screening, severity testing and symptom profiling. The scale composes of 7 subscales: washing, checking, doubting, ordering, obsessing, hoarding and mental neutralizing. Each item is rated using a 5-point Likert scale of symptom distress. A cut-off point of 40 and above suggests a diagnosis of OCD. The authors have reported good reliability and validity of the OCI both with clinical and non-clinical samples.

The Short Health Anxiety Inventory (SHAI; Salkovskis et al., 2002) is a 14 item self-report questionnaire which was specifically develop to measure clinical and non-clinical health anxiety independently of physical health status. Items assess excessive worry about health, awareness of bodily sensations or changes and feared consequences. The instrument has demonstrated good reliability and validity in clinical and non-clinical samples (Abramowitz, Deacon, et al., 2007; Abramowitz, Olatunji, et al., 2007; Salkovskis et al., 2002). A cut-off point of 18 or higher reliably and exclusively identifies people fulfilling DSM-IV diagnostic criteria for hypochondriasis, whereas people scoring 15-17 tend to be a mixture of hypochondriacal patients and people who are very health anxious but just miss criteria for the clinical diagnosis.

The Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001) is a 9-item self-report measure assessing symptoms of depression. Symptom severity is rated on a 0-3 point scale, over the last 2 weeks. As a severity measure, the PHQ-9 scores range from 0 to 27. According to the authors, a score of 10 (as a single screening cut-point) suggests that the person is suffering from clinically significant symptoms of depression. The internal reliability, factors structure, validity, and sensitivity to change have all been reported to be good (Cameron et al., 2008; Kroenke & Spitzer, 2002; Kroenke et al., 2001).

Generalised Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006) is a 7-item self-report questionnaire with good reliability and validity. Though designed primarily as a screening and severity measure for generalised anxiety disorder, it has also been found to be reasonably accurate in assessing for panic, social anxiety, and post-traumatic stress disorder (Kroenke et al., 2007). According to the authors a score above 8 suggests clinically significant anxiety symptoms. The scale has been found to have good reliability and validity (Löwe et al., 2008; Spitzer, Kroenke, Williams, & Löwe, 2006).

The Work and Social Adjustment Scale (WSAS; Mundt et al., 2002) is a 5-item self-report measure. Each item is rated on a scale of 0 to 8, which can be pooled (total score 0 – 40; there is no clinical cut off, but higher scores denote more disability). It is meant to measure the impact of a person's mental health difficulties on their ability to function in terms of work, home management, social leisure, and private leisure and personal or family relationships. Studies have shown that WSAS is reliable, valid and sensitive to change (Mataix-Cols et al., 2005; Mundt et al., 2002).

The Panic Rating Scale (Clark and Salkovskis, unpublished) is a self-report scale devised to measure the severity of panic disorder. The questionnaire offers a definition of panic attacks and lists common physical sensations that are frequently associated with panic attacks. Respondents are then asked to the frequency of their panic attacks, the severity of them and how much avoidance they engage in. The scale has not been published but is frequently used to aid the diagnosis of panic disorder.

The Social Phobia Inventory (SPIN; Connor et al., 2000) is a 17-item self-rated questionnaire developed as a measurement for the screening of, and treatment response to social phobia. Each item is rated using a five-point scale ranging from 0 to 4. A cut-off score of 19 or above suggests that the person is suffering from social phobia. Initial findings, showed good internal consistency and test-retest reliability (Connor et al., 2000). Other studies have further confirmed that the instrument is valid and reliable (Antony, Coons, McCabe, Ashbaugh, & Swinson, 2006; Radomsky, Ashbaugh, et al., 2006).

Procedure

The study protocol of this study was approved by an NHS Research Ethics Committee (Ref. 14/WA/0057) and also received ethical approval from the University of Bath, Department of Psychology Ethics Committee (Ref. 14-064).

Participants could express their interest in taking part in the research by calling the principal investigator's office number, contact him by email or ask their mental health professional to forward their details. After having received the participants' contact details, the questionnaire pack was posted to them and they asked to complete it in their own time. They were provided with 'freepost' envelopes to post them back. Once the questionnaire pack was returned to the researcher, an email was sent to schedule a telephone meeting (or to meet in person) between the research participant and the principal investigator. This was done to give each participant an opportunity to ask questions they may have had about the study, but most importantly to make a clinical diagnosis of their main presenting problem. During this conversation each participant was asked to describe in their own words what they suffered from, its history and so on. They were asked for clarifications when appropriate and questions in relation to their problem/s. Aided by

the questionnaires and the relevant sections from the SCID semi-structured diagnostic interview, a diagnosis of the main presenting problem was given and the participant assigned to the appropriate clinical group.

In some cases there was an uncertainty regarding the main presenting problem. Under these circumstances, the principal investigator consulted a senior clinical psychologist who has extensive experience in the theory and treatment of emotional problems. The structure of the consultation was the following:

- i. The principal investigator provided information about how the participant had described his/her problem without enclosing what he considered to be the participant's presenting problem. At this point, any questionnaire data was withheld from the senior clinician to prevent it from influencing his decision at this point.
- ii. The senior clinician was allowed to ask the principal investigator further questions about the case and if the information was available it was shared.
- iii. Next, questionnaire scores were provided to aid diagnosis.
- iv. Any disagreement between the senior clinician and the principal investigator were discussed until an agreement was made regarding the decision to either include or exclude the participants based on what was considered to be his/her main presenting problem.
- v. If further information was required from the participants before a diagnosis could be made, a new telephone meeting was scheduled. This new information was then brought back for case discussion before a diagnosis was given.

The principal investigator was responsible for recruiting the clinical participants and doing the assessments. However, it should be acknowledged that five participants were recruited and assessed by a different therapist who worked in a mental health service.

Non-clinical participants were approached by a research assistant or the principal investigator in community settings and given a brief introduction about the study. If the person showed interest in taking part in the study, they were given a questionnaire pack in a sealed envelope and asked to complete it in their own time and send back to the researcher using a freepost envelope. It is important to note that the healthy control group were not requested to fill in the WSAS, PRS and SPIN questionnaires. This was simply done for practical reasons since it was felt more likely that healthy volunteers would agree to take part in the study if they could go through the pack within 15 minutes.

Data Analytic Strategy

All data were managed and analysed using IBM SPSS (2013). The data analytic strategy was as follows:

- i. Firstly, the participants' demographic status was examined to see whether the groups were comparable. One way ANOVAs were conducted for non-categorical variables, and Chi square tests were performed for categorical variables.
- ii. Secondly, the participants' measure of general psychopathology were examined as a way of defining the groups. A series of one-way ANOVAs were conducted where group (OCD vs. HA vs. AC vs. HC) served as the between-participants factor and participants' scores on each questionnaire served as the outcome variable. For significant differences, LSD post hoc tests were performed. If there was a violation to the assumption of equal variance, i.e. Levene's test was significant, adjusted F statistics were applied by using the Welch test and the Games-Howell tests for post hoc analysis (Field, 2013).
- iii. Third, scale's internal consistency was calculated (Chronbach's alpha).
- iv. Finally, the four 'core' subscales were collapsed into one factor and the same was done for the four 'other' less specific subscales. A mixed model ANOVA was conducted with the group condition as a between-subjects factor and the two grouped subscales, as a within-subjects factor. If there was evidence for significant interactions, simple main effects one way ANOVAs were performed followed by LSD post-hoc analysis.

Results

Demographic Status

The participant recruitment flow chart is shown in Figure 14. In total, 299 individuals were recruited for the study.

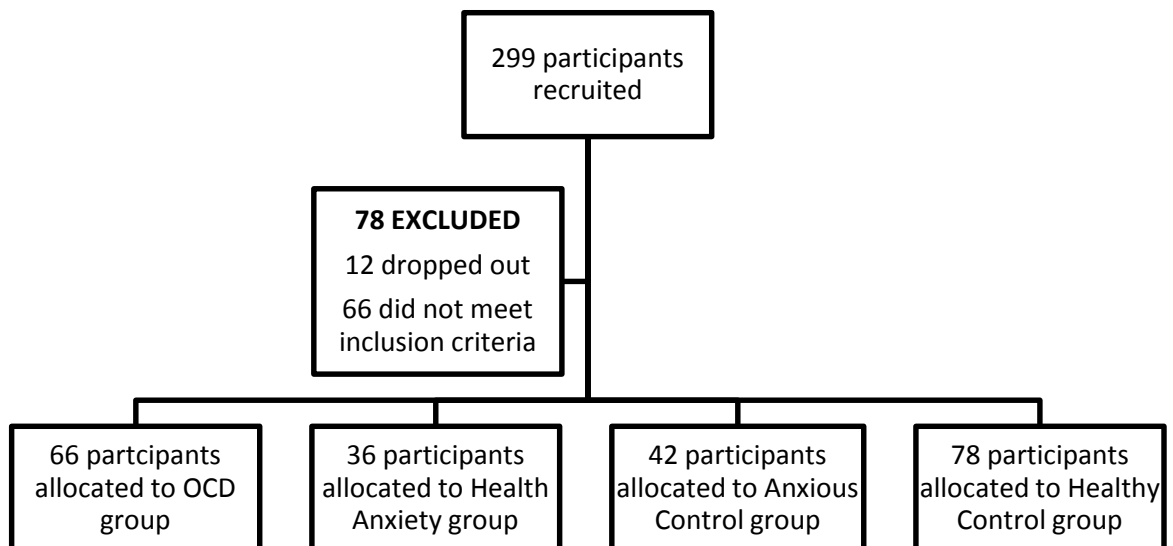


Figure 14. Participant recruitment flow chart

Participants were split into clinical or non-clinical participants. In total, 190 individuals were recruited for the clinical groups; 12 individuals (out of the total 190) returned a complete set of questionnaires but later dropped out of the study before a diagnosis was made (they did not respond to email or telephone follow-ups). Further 27 participants were excluded due to comorbid diagnosis of OCD and health anxiety ($n = 9$); primary diagnosis of GAD with comorbid OCD ($n = 2$); primary diagnosis of GAD with comorbid Health Anxiety ($n = 1$); primary diagnosis of Social Phobia with comorbid OCD ($n = 2$); primary diagnosis of Social Phobia with comorbid Health Anxiety ($n = 2$); primary diagnosis of Panic Disorder with comorbid Health Anxiety ($n = 2$); Primary diagnosis of PTSD ($n = 4$); primary diagnosis of Specific Phobia ($n = 2$); primary diagnosis of Autism ($n = 1$); primary diagnosis of a personality disorder ($n = 2$). Further 8 participants were excluded because they were considered to be in recovery for OCD ($n = 4$) or Health Anxiety ($n = 4$).

For the non-clinical participants (healthy controls; HC group), 31 out of 109 potential participants were excluded from the study after completing the questionnaire pack since their scores were above the clinical cut-off on any of the questionnaires.

The final sample consisted of 221 participants who were split into four groups for the analysis: (i) 66 individuals whose symptoms met DSM-IV criteria for Obsessive Compulsive Disorder according to DSM-IV; (ii) 36 individuals whose symptoms met DSM-IV criteria for hypochondriasis (health anxiety); (iii) 42 individuals whose symptoms met DSM-IV criteria for a principal diagnosis of Panic Disorder with/without agoraphobia, Social Phobia, or Generalized Anxiety Disorder; and 78 non-clinical participants (healthy control group).

Demographic status for each group is presented in Table 13. A one-way ANOVA revealed that the four groups were not different in terms of age, $F(3, 217) = 2.363, p = .072$. Chi square calculations revealed that the four groups were also not different in terms of marital status, $\chi^2(3) = 6.917, p = .075$. For statistical analysis of ethnicity, the non-white ethnic backgrounds were collapsed into one group (due to small numbers in the non-white groups). Chi square tests indicated that the groups were not significantly different in terms of ethnicity, $\chi^2(3) = 1.703, p = .636$. However, occupational status was significantly different between groups, $\chi^2(3) = 8.437, p = .038$.

Epidemiologically it would be reasonable to assume that people without psychiatric problems are more likely to have a job. Thus, when running the initial partitioned Chi squares the HC group was removed. This revealed that the HC group was more likely to be working or in education compared to the clinical groups. No significant differences emerged between the clinical groups ($p = .111$). Next, each clinical group was compared to the HC group on the same variable (2×2), which revealed a significant difference between the HC and OCD group ($p = .031$) and the HC and HA group ($p = .032$) but not for HC and AC group ($p = .891$).

With regards to gender, Chi square tests revealed significant difference between the groups $\chi^2(3) = 9.834, p = .020$. Further partitioned Chi square tests revealed a significantly higher proportion of male participants in HC group in comparison to the OCD group ($p = 0.004$). No other significant differences between the groups emerged. Finally, educational qualification was significantly different, $\chi^2(3) = 17.910, p = .006$. Further partitioned Chi square calculations revealed that the HC group was better educated relative to the HA group ($p = .001$) and the AC group ($p = .039$) but not in comparison to the OCD group ($p = .079$). The OCD groups' educational level was significantly higher in comparison to the HA group ($p = .023$); while no significant differences emerged for the HA and AC group ($p = .485$); or the OCD and AC group ($p = .171$).

Table 13. Demographic status

		OCD (n = 66)	HA (n = 36)	AC (n = 41)	HC (n = 78)
Gender	% (n) Female	83.3 (55)	77.8 (28)	78 (32)	61.5 (48)
Age	M	34.65	40.03	37.61	39.03
	(SD)	(10.80)	(12.86)	(9.21)	(12.56)
Ethnicity	% (n) Asian	3 (2)	0 (0)	0 (0)	1.3 (1)
	% (n) Black	0 (0)	0 (0)	0 (0)	1.3 (1)
	% (n) White	90.9 (60)	94.4 (34)	92.7 (38)*	93.6 (73)**
	% (n) Mixed	4.5 (3)	2.8 (1)	4.9 (2)	1.3 (1)
	% (n) Other	1.5 (1)	2.8 (1)	0 (0)	0 (0)
Highest Educational Qualification	% (n) None or primary	4.5 (3)	11.1 (4)	0 (0)	0 (0)
	% (n) Secondary or diploma	28.8 (19)	50 (18)	51.2 (21)	34.6 (27)
	% (n) Degree or postgraduate	66.7 (44)	38.9 (14)	48.8 (20)	65.4 (51)
Relationship Status	% (n) With partner ^a	63.7 (42)	83.3 (30)	63.4 (26)	76.9 (60)
	% (n) Without partner ^b	36.3 (24)	16.7 (6)	36.6 (15)	23.1 (18)
Occupation	% (n) Employed/education	68.2 (45)*	66.7 (24)	85.4 (35)	83.3 (65)*
	% (n) Not empl./education	30.3 (20)	33.3 (12)	14.6 (6)	15.4 (12)

Note: Means are reported with standard deviations in parentheses. Where percentages are reported, frequencies are shown in parentheses.

OCD: Obsessive Compulsive Disorder group; HA: Health Anxiety disorder group; AC: Anxious Controls group; HC: Healthy Control group.

* missing values (n=1)

** missing values (n=2)

^a married, dating, cohabiting

^b single, separating, divorced, widowed

General measures of psychopathology

Participants' mean scores and group comparison statistics for the self-report measures are displayed in Table 14. A series of one-way ANOVAs were conducted where group (OCD vs. HA vs. AC vs. HC) served as the between-participants factor and participants' scores on each questionnaire served as the dependent variable. Where the assumption of equal variance was violated (Levene's test was significant), adjusted F statistics were applied using the Welch statistic and Games-Howell tests for post-hoc analysis. It should be noted that the same findings were revealed when adjusted F statistics was not applied (F values from both analysis are presented in Table 14).

The analysis revealed that the four groups were significantly different (all p 's < .0001) on the OCI, HAI, GAD-7 and PHQ-9. Post-hoc multiple comparisons (using Games-Howell or LSD) showed that participants in the OCD group scored significantly higher on the OCI than all other group participants, while the HA and AC groups scores did not differ significantly from each other, and the HC significantly lower than all the clinical groups. When considering the OCI subscales, the OCD group scored significantly higher on all seven subscales compared to the other three groups while some other groups' subscale scores did not differ significantly from each other.

Health anxious participants reported significantly greater health anxiety (HAI) than those in the OCD, AC and HC groups, while the OCD and AC group did not differ from each other. The HC scored significantly lower than all three clinical groups on the HAI. The three clinical groups scored significantly higher on both the GAD-7 and the PHQ-9 in comparison with the HC group but they did not differ from each other.

The remaining three questionnaires (i.e. WSAS, PRS, and SPIN) were only completed by the clinical groups. A one-way ANOVA¹⁰ revealed that the three groups scored significantly different on the WSAS and the SPIN. Post-hoc multiple comparisons using LSD tests revealed that the OCD group scored significantly higher on the WSAS than the HA and AC groups indicating greater overall impairment. Furthermore, the AC group scored significantly higher on the SPIN in comparison with the HA group.

Table 14. Mean scores and group comparison statistics for the self-report measures

	OCD (n = 66)	HA (n = 36)	AC (n = 41)	HC (n = 78)	ANOVA	ANOVA Adjusted F (Welch)
Variable	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
OCl (total)	79.56 (30.41) ^a	21.53 (16.08) ^b	26.85 (18.16) ^b	8.59 (7.08) ^c	$F(3, 217) = 169.278^*$	$F(3, 81.977) = 124.696^*$
Washing	14.74 (11.15) ^a	2.97 (5.15) ^b	2.59 (4.70) ^b	0.82 (1.44) ^b	$F(3, 217) = 57.011^*$	$F(3, 77.359) = 36.228^*$
Checking	17.11 (8.52) ^a	3.94 (3.69) ^b	4.80 (4.86) ^b	1.90 (2.20) ^c	$F(3, 217) = 103.061^*$	$F(3, 86.230) = 68.418^*$
Doubting	7.55 (3.57) ^a	1.36 (1.97) ^{ab}	2.66 (3.15) ^{abc}	0.79 (1.19) ^{ab}	$F(3, 217) = 89.923^*$	$F(3, 85.812) = 72.791^*$
Ordering	9.29 (5.50) ^a	1.69 (3.18) ^{ab}	3.68 (3.93) ^{abc}	1.21 (1.56) ^{ab}	$F(3, 217) = 61.299^*$	$F(3, 83.424) = 47.003^*$
Obsession	18.48 (8.03) ^a	7.81 (5.34) ^b	8.02 (5.66) ^b	1.89 (2.36) ^c	$F(3, 217) = 104.475^*$	$F(3, 82.953) = 103.255^*$
Hoarding	2.91 (3.23) ^a	1.39 (1.93) ^{bc}	2.00 (2.83) ^{abc}	0.88 (1.04) ^{bc}	$F(3, 217) = 9.186^*$	$F(3, 84.361) = 9.455^*$
Neutralizing	9.48 (5.93) ^a	2.42 (2.57) ^b	3.10 (2.42) ^b	1.10 (1.24) ^c	$F(3, 217) = 69.459^*$	$F(3, 84.784) = 48.623^*$
HAI (total)	16.79 (7.61) ^a	30.50 (5.75) ^b	15.05 (6.07) ^a	7.62 (3.37) ^c	$F(3, 217) = 130.035^*$	$F(3, 88.976) = 177.798^*$
GAD-7	13.37 (5.26) ^a	13.81 (4.64) ^a	12.07 (5.57) ^a	2.69 (2.36) ^b	$F(3, 217) = 94.915^*$	$F(3, 85.622) = 141.233^*$
PHQ-9	12.24 (7.14) ^a	11.47 (6.30) ^a	11.56 (6.58) ^a	2.53 (2.35) ^b	$F(3, 216) = 45.857^*$	$F(3, 81.312) = 72.685^*$
WSAS	20.32 (9.61) ^a	16.00 (8.37) ^b	15.78 (8.67) ^b	n/a	$F(2, 123) = 3.778^{**}$	n/a
SPIN	25.70 (17.23) ^a	20.72 (15.10) ^{ab}	31.39 (16.14) ^{ac}	n/a	$F(2, 140) = 4.085^{**}$	n/a
PRS	5.75 (5.77) ^a	7.74 (5.50) ^a	7.59 (6.55) ^a	n/a	$F(2, 138) = 1.805$	n/a

Note: Group means with differing superscripts differed significantly at the 0.01 level.

** $p < .0001$; ** $p < .05$;*

¹⁰ The test for homogeneity of variance was not significant.

The Reassurance Seeking Questionnaire (RSQ) Descriptives

Table 15 provides a descriptive overview on the RSQ questionnaire, by listing the means and standard deviations for each of the scale items (starting with the highest endorsed item).

Table 15. Descriptive overview of the Reassurance Seeking Questionnaire

Item	N	Mean	SD
I ask for reassurance from people I know	221	3.27	1.485
I show my appreciation (e.g., say 'thank you') to make the person comfortable with giving reassurance	221	3.21	1.562
I ask for reassurance from people close to me	221	3.17	1.413
When I seek reassurance I try not to ask too many times so I don't upset or annoy the person	221	3.04	1.556
I ask for reassurance from my partner	197	2.91	1.741
When I seek reassurance I try to analyse whether the person fully understands my worry	221	2.82	1.660
I ask for reassurance from my family	221	2.75	1.330
When someone is giving me reassurance I look carefully at the person to see if they are confident about what they say to me	221	2.73	1.634
I find it hard to resist seeking reassurance	221	2.66	1.694
I believe that my anxiety will not go down until I get reassurance	221	2.53	1.524
When I seek reassurance I become annoyed if the person answers in an inconsistent manner	221	2.52	1.707
I use phrases (e.g., Is this all right?) so that the person won't know that I am seeking reassurance	221	2.42	1.592
When I seek reassurance I feel it reduces the burden of responsibility	221	2.41	1.560
If possible, I will continue to seek reassurance until I feel 'just right'	221	2.39	1.764
I seek reassurance more often than necessary	221	2.38	1.791
If I do not get reassurance in the 'right way' I seek it until I get it	221	2.31	1.677
If possible, I will continue to seek reassurance until I feel certain	221	2.30	1.690
When I seek reassurance I look for mistakes and contradictions in how people answer my questions	221	2.29	1.793
I ask others to do things as a way of reassuring me	221	2.19	1.488
Seeking reassurance is counter-productive for me	221	2.18	1.615
I feel that seeking reassurance can make my problems worse	221	2.05	1.560
When I seek reassurance I repeat what the person says so that they can confirm it	221	2.05	1.655
My reassurance seeking puts strain on other people	221	1.97	1.592
People feel frustrated when I seek reassurance from them	221	1.96	1.526
I feel that nothing can substitute for reassurance	221	1.95	1.641
I seek reassurance to make sure there is nothing wrong with my health	221	1.90	1.759
I repeatedly ask others for reassurance until I am sure they understand what I am worried about	221	1.90	1.696
When I seek reassurance it brings me closer to the other person	221	1.85	1.335
AFTER I have sought reassurance I feel frustrated	221	1.84	1.569
AFTER I have sought reassurance I feel guilty	221	1.81	1.635
I disagree with people who say that reassurance seeking is unhelpful for me	221	1.79	1.515
I avoid asking for reassurance because I know it frustrates other people	221	1.75	1.394
When I seek reassurance I ask the person to repeat what they said to me	221	1.72	1.517
I seek reassurance from other people even when I can see that it frustrates them	221	1.71	1.497
AT THE TIME I seek reassurance it makes me feel frustrated	221	1.62	1.433

Internal consistency - Full scale

The internal consistency (Cronbach alpha) for the overall 35-item scale was .963 suggesting excellent internal consistency. The greatest increase in alpha would come from deleting item 31, but removal of this item would increase alpha only by .001. Three items did not correlate very well with the scale overall ($r < .3$). These were item 4: “When I seek reassurance I try not to ask too many times so I don’t upset or annoy the person”; item 15: “When I seek reassurance it brings me closer to the other person”; and item 26: “I avoid asking for reassurance because I know it frustrates other people”. However, these items were retained despite the low correlation with the overall scale for two reasons: (i) when each item was analysed separately for each target group the correlation reached $>.5$, and (ii) the results from the qualitative analysis in the preceding chapters suggested that people who suffer from OCD or health anxiety feel that reassurance can strengthen their relationships and disagree with others views that reassurance seeking is unhelpful for them (in particular those that suffer from health anxiety). In addition, people with OCD choose carefully how they seek reassurance (in line with item 4).

a priori Theoretically Derived Subscales

The internal consistency for each *a priori* theoretically derived subscale ranged from .627 to .903. The average inter-item correlation was also examined to assess the internal consistency of the theoretically driven subscales based on Clark and Watson (1995) recommendation. Average inter-item correlations for the five factors were consistent with recommendations for assessment of narrower constructs, ranging from .295 to .686. A summary of the properties for each subscale is presented in Table 16.

Table 16. Scale properties

<i>a priori</i> Theoretically Derived Subscales	Total items	Alpha	AIIC
Who	4	.832	.567
Motivation	8	.888	.484
How	7	.903	.572
Process	4	.842	.571
Interpersonal Care	4	.627	.295
Post Reassurance Affect	2	.814	.686
Negative Interpersonal Effect	4	.775	.458
Insight	2	.828	.707

* Note AIIC: Average Inter-Item Correlations. N 221

***a priori* Theoretically Derived Subscales - Primary Analysis**

For a primary analysis, the four 'core' subscales were collapsed into one factor and the same was done for the four 'non-core' (less specific) subscales. Means and standard deviations for each group on both subscales are presented in Table 18 and means are graphed in Figure 15. A mixed model ANOVA was conducted with the group condition as a between-subjects factor and the two grouped subscales, as a within-subjects factor. Findings revealed a significant main effect of Group, $F(3, 217) = 59.347, p < .00001$ and a significant main effect of subscale, $F(1, 217) = 8.303, p = 0.004$. These main effects were modified by a significant interaction (subscale x group), $F(3, 217) = 3.951, p = .009$. To break the interaction down, simple main effect one-way ANOVAs were carried out which showed significant main effect for Group on both subscales. Post-hoc multiple comparisons using LSD revealed that the HC group scored significantly lower than all other groups on both factors. With regards to the clinical groups, the OCD and HA groups scored higher than the AC group on both factors ($p < .0001$). No difference emerged between the OCD and HA group on both factors ($p = .292$ for 'core' subscale; $p = .439$ for 'non-core' subscale).

Table 17. Means and standard deviations for all groups on Core and Non-Core scales

Subscale	OCD (n = 66)		HA (n = 36)		AC (n = 41)		HC (n = 78)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Core	3.17 ^a	.91	2.98 ^a	.90	2.18 ^b	.99	.80 ^c	.09
Other	2.84 ^a	.81	2.71 ^a	.79	2.29 ^b	.87	1.38 ^c	.74

Note: Identical superscript letters indicate non-significant differences between groups, based on LSD multiple comparison test ($p > .05$)

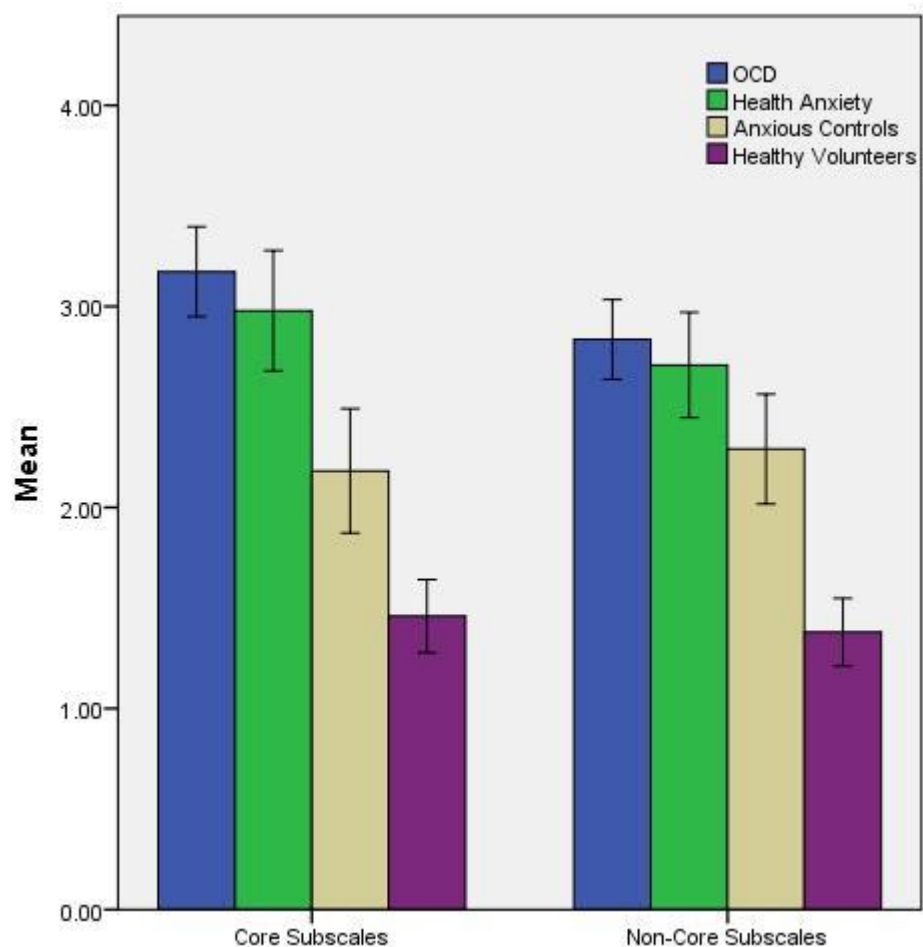


Figure 15. Groups' mean scores on the Core and the Non-Core subscales

Note: Error bars +/- 2 SE

Further analysis was done in order to understand the source of the interaction. This time none of the eight subscales were collapsed together. Means and standard deviations for the four groups on each subscale are presented in Table 19. Means are also graphed in Figure 16. A mixed model ANOVA was conducted with the group condition as a between-subjects factor and the eight *a priori* theoretically derived subscales, as a within-subjects factor. There was a significant main effect of group, $F(3, 217) = 60.883, p < .001$ and a significant main effect of subscale, $F(4.280, 928.789) = 38.682, p < .0001^{11}$. These main effects were modified by a significant interaction (subscale x group), $F(12.840, 928.789) = 4.738, p < .0001$, indicating that ratings across different subscales varied between the groups. To analyse the nature of this interaction further simple main effect one-way ANOVAs were carried out. These revealed significant main effects for Group on all subscales. Post hoc multiple comparisons using LSD revealed that the HC group scored

¹¹ Mauchly's test indicated that the assumption of sphericity had been violated, $\chi^2(27) = 424.654, p < .0001$; thus degrees of freedom were corrected using Greenhouse-Geisser ($\epsilon = .61$).

significantly lower than all other groups on all subscales. The AC group was different from the other two clinical groups except on one subscale, i.e. the 'Interpersonal Care' subscale, where all three clinical groups scored similarly. Finally, the OCD group and the HA group scored significantly different on one subscale, i.e. the 'Process' subscale, where the OCD group scored significantly higher than all other groups.

Table 18. Means and standard deviations for the four groups on each subscale

	OCD (n = 66)		HA (n = 36)		AC (n = 41)		HC (n = 78)	
Subscale	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
<i>Who</i>	3.77 ^a	.91	3.40 ^a	1.09	2.83 ^b	1.22	2.39 ^c	1.10
<i>Motivation</i>	2.87 ^a	1.02	3.07 ^a	.85	2.00 ^b	1.09	1.21 ^c	.81
<i>How</i>	3.17 ^a	1.14	2.90 ^a	1.11	2.10 ^b	1.10	1.40 ^c	.94
<i>Process</i>	3.17 ^a	.99	2.59 ^b	1.11	2.00 ^c	1.17	1.11 ^d	.84
<i>Interpersonal Care</i>	2.98 ^a	.93	2.75 ^a	.93	2.76 ^a	1.05	2.14 ^b	1.05
<i>Reassurance Affect</i>	2.66 ^a	1.50	2.35 ^a	1.16	2.10 ^b	1.47	.73 ^c	.78
<i>Negative Interp. Effect</i>	2.78 ^a	.99	2.81 ^a	.97	2.02 ^b	1.12	1.02 ^c	.84
<i>Insight</i>	2.83 ^a	1.49	2.78 ^a	1.13	2.09 ^b	1.48	1.22 ^c	1.05

Note: The identical superscript letters indicate non-significant difference between groups, based on LSD multiple comparison test ($p > .05$)

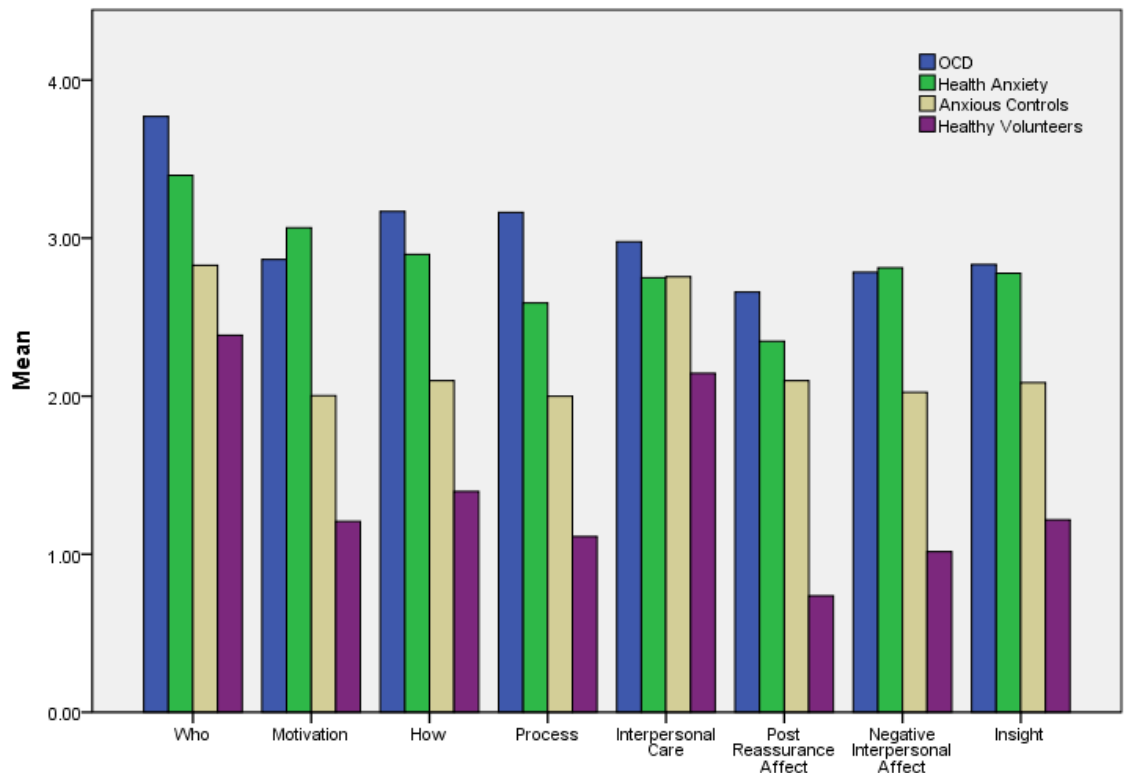


Figure 16. Groups' subscale mean scores

Discussion

The present study aimed to identify the degree of specificity of excessive reassurance seeking (ERS) to OCD and health anxiety relative to other anxiety disorders, and also to identify the degree of similarities and differences of ERS in OCD and health anxiety. Part of this was to identify the core features of ERS and also the less specific features; i.e. features which are highly relevant to the concept but more focused on the “downstream” effects of the behaviour and not necessarily specific to OCD or health anxiety and seen more broadly across different anxiety problems. The study aims were largely achieved, that is the RSQ showed that the core features of ERS and the downstream effects of it play a role in all of the anxiety disorders assessed, but to a greater degree in OCD and health anxiety. In addition, more similarities than differences emerged between the OCD group and the health anxious group suggesting a similar function for ERS in these two conditions; in fact, the only evidence of specificity was that individuals with OCD tend to become more frustrated and annoyed in relation to ERS and find it harder to resist engaging in the behaviour in comparison with people suffering from health anxiety.

Results of this study suggest that reassurance seeking can be understood as a behaviour which represents a final common pathway of multiple processes, i.e. it is not confined to those who suffer from emotional problems and there is some evidence of specificity between different emotional disorders. This finding is of course not surprising, but clinically it is promising that this new measure, differentiates to some degree normal levels of reassurance seeking from pathological ones. This finding is also in line with the idea that reassurance seeking runs on a continuum, where normal and pathological reassurance seeking is not defined by the absence of the behaviour, but instead by the frequency of the behaviour, how debilitating it is, how it is sought, what motivates people to seek it and so on. In addition, the questionnaire clearly suggests that excessive reassurance seeking plays an important role across many different anxiety problems but to a different degree.

When the questionnaire was broken down into theoretically derived subscales, it identified specificity in the function of ERS in people who suffer from OCD and health anxiety as opposed to people who fulfil diagnosis for panic disorder, GAD or social phobia. As an example, there was evidence that individuals who suffer from OCD or health anxiety seek reassurance more frequently, feel differently afterwards and their intentions when seeking reassurance are different when compared to sufferers of other anxiety problems. This suggests that ERS in OCD and health anxiety functions differently in comparison with other anxiety problems. This is also an interesting finding when we consider the existing questionnaire literature, where ERS has been examined, which has mostly failed to find evidence of specificity when examining the concept in OCD and

comparing it to other anxiety problems such as panic disorder, social phobia and GAD (Cougle et al., 2012; Kobori & Salkovskis, 2013; Rector et al., 2011).

There was much less evidence for specificity when the function of ERS was compared between individuals with OCD and health anxiety. The expectation was that a fine-grained analysis would reveal much more specificity, for example, in terms of frequency of the behaviour and what drives the behaviour in these two disorders. In other words, based on the RSQ questionnaire, excessive reassurance seeking seems to function almost identically in OCD and health anxiety. Surprisingly, there was little evidence of difference in terms of motivational factors, frequency, who they seek reassurance from, how they do it, how they feel afterwards, and the various negative interpersonal effects which are associated with excessive reassurance seeking seem to be shared across these two clinical groups. In fact, the only evidence of disorder specificity was on the 'process' subscale, suggesting that individuals with OCD find it harder than people who suffer from health anxiety to resist engaging in reassurance seeking and experience more frustration and annoyance as a result of the behaviour. This finding is consistent with the findings from the qualitative studies presented in Chapter 3 and 4 where frustration was identified as an important concept in ERS. It also fits with the author's previous discussion about how the two concepts of egodystonicity and egosyntonicity may explain why individuals who suffer from health anxiety are less likely than OCD sufferers to show any resistance to seeking reassurance.

Taken together the findings on the topography of excessive reassurance seeking indicate a final common pathway with the differences most likely lying in factors, which are involved in the generation of the behaviour and its consequences. Put more simply, people suffering from different emotional problems may all seek reassurance in exactly the same way (shared topography) but for different reasons and with different consequences.

Is excessive reassurance seeking a transdiagnostic process?

In line with other questionnaire studies (e.g., Cougle et al., 2012; Kobori & Salkovskis, 2013; Rector et al., 2011), this study offers further support that people who suffer from anxiety problems show universally elevated levels of reassurance seeking. If we then assume that ERS is a maintenance factor in the same problems, it begs the question whether ERS is a transdiagnostic process. The author believes that the answer to that question is both complicated and boils down to how we define *transdiagnostic* as a concept. If we define it as a process that features across various emotional problems and maintains them, then the answer is clearly 'yes'. However, the author feels that has limited clinical value since it ignores the possibility that ERS might be performing a completely different function in different disorders. The potential negative clinical consequences from that are untargeted and unhelpful treatment interventions. Excessive

reassurance seeking is clearly a transdiagnostic behaviour, but what is less clear is whether the processes that underpin it, including the antecedents and consequences of the behaviour, are transdiagnostic. With regards to the antecedents, it may be that the perception of threat is truly transdiagnostic while feelings of responsibility are only relevant to OCD and health anxiety. Similarly, the consequences may be different between disorders, where people process the reassurance differently and the impact of getting reassurance may be diverse. As an example, Salkovskis and Kobori (submitted) demonstrated in a questionnaire study using a sample of OCD and panic disorder sufferers, that the provision of reassurance reduced anxiety in the short-term. However, some differences emerged when the longer term effects were examined where individuals with OCD reported feeling worse than the panic disorder group if reassurance was to be withheld from them.

The aim of this study was to offer a much finer grained analysis of what exactly the cognitive and behavioural factors involved in ERS are across and within different disorders. For example, which factors are involved in motivating or generating reassurance, and what are the consequences of the reassurance on the motivating processes. The results from this study suggest that ERS functions differently in OCD and health anxiety as opposed to panic disorder, GAD and social phobia, which is consistent with the study predictions. However, the findings also suggest a limited degree of specificity of reassurance to OCD as opposed to health anxiety; indicating that the function of ERS may be clustered around these disorders with shared function and topography within these two disorders. Taken together it seems that the answer to the question whether ERS is a transdiagnostic process, is that some processes are truly transdiagnostic while others are not. Further research is clearly needed where the scope could be expanded to include processes that related to the antecedents and consequences of excessive reassurance seeking.

Study Limitations and future directions

Limitations of the study findings, as well as directions for future studies deserve mentioning. None of the participant groups was big enough to be considered sufficient for exploratory factor analysis on the questionnaire (Field, 2013). Thus, a factor analysis might reveal a different subscale structure. As a first step, it is sensible to factor analyse the scale using a larger sample, followed by further validation studies to ensure the construct validity and factor stability of the scale.

The clinical sample consisted of volunteers (convenience sample) drawn from a population who were either seeking help for their psychological problem (e.g. via the NHS) or who had access to and were familiar with the Internet (several self-help organisations advertised for volunteers on their websites). This recruitment procedure does exclude populations that may have different

understanding and experiences of ERS (e.g. due to cultural differences in terms of how psychological problems are understood/accepted). Thus, the results presented here may not be representative of a broader based population.

It should also be acknowledged that although all clinical group participants were diagnosed using a recognized and well validated screening tool (SCID; First et al., 1996) along with their questionnaire scores, the decision to exclude non-clinical group participants was entirely based on their questionnaire scores. Although the measures are well validated and considered reliable in identifying psychopathological problems, they are of course still limited, meaning that some of the non-clinical sample may in fact have been experiencing emotional problems at the time of the study. This may impact on the generalizability of the findings since it may contaminate the specificity of excessive reassurance seeking in anxiety disorders compared to healthy controls. A follow-up study would benefit from a more thorough clinical assessment for the non-clinical group participants.

In terms of their measure of psychopathology, the groups scored in a pattern that was considered appropriate for the comparisons that were applied in the study. That is, the non-clinical group scored significantly lower than all other groups; the clinical groups were equally depressed and anxious; and the OCD group was suffering from more severe symptoms of OCD in comparison with all the other groups, and the health anxious group participants were more health anxious than all other participants. There were some differences identified between the groups when demographic status was examined which required the consideration of the need to co-vary for such differences. However, the differences that were identified typically did not hold when Bonferroni correction was applied. Also, the remaining difference that were identified were mostly related to the healthy control sample where you would expect to see those differences (e.g. people who do not suffer from emotional problems are more likely to be working compared to those who suffer from anxiety disorders). However, future studies should try to minimize that similar differences emerge.

It is important to note that although the Reassurance Seeking Questionnaire included statements that refer to excessive reassurance seeking in general (e.g. "I seek reassurance more often than necessary"; "I seek reassurance from people I know"), many of the questionnaire items were included on the basis of being specific to OCD and/or health anxiety while items which could be specific to other anxiety problems were not identified or included. This inconsistency can partly be explained by the fact that most of our knowledge about ERS within the context of anxiety problems is for OCD and health anxiety but not for other anxiety disorders. In other words, we know very little about the potential diagnosis specificity of ERS within the context of, for example, panic disorder. However, this may mean that the findings were to be expected, i.e. the diagnostic

specificity that was identified in this study may simply be a result of the choice of questionnaire items. Future research would benefit from defining the function (or aspect) of ERS that sufferers of various anxiety problems perceive as distressing and then developing a broad measure of ERS and also disorder specific ERS measures relating to these disorders.

Experimental tests on the function of reassurance seeking are greatly needed. So far, most of our knowledge about its function derives from questionnaire based studies or qualitative analysis. Parrish and Radomsky (2006) have correctly identified the difficulties in triggering experimentally a 'real urge' to seek reassurance; an urge that mimics the lived experiences of those who suffer from anxiety problems and rely heavily on reassurance seeking to deal with their perception of threat. This is understandable given that reassurance seeking is an *interpersonal* behaviour; it is between people, and consequently it is more complicated to trigger in comparison with many other safety-seeking behaviours that are usually under the sufferers sole control. However, it is important for the progress and improvement of therapy for ERS that researchers establish reliable and effective means of examining the function of ERS experimentally. A recent paradigm was developed by Kobori and colleagues (unpublished) aimed at experimentally examining the function and consequences of reassurance seeking in OCD. All participants were asked to touch a 'plastic dog poo' and wash under three conditions: (i) the provision of 'meaningful reassurance' where participants were asked to seek reassurance from a member of the research team (while they washed) who showed that he understood their questions; (ii) the provision of 'superficial reassurance' where the 'reassurer' appeared as he did not understand their questions; and (iii) control condition. The researchers hypothesised that reassurance seeking would lead to a temporary reduction in anxiety and urges to carry out washing rituals and that participants would feel more reassured by people who indicated they understood their fears. Results indicated that reductions in washing time and feelings of anxiety were unaffected by the stimulus or the provision of reassurance. However, the absence of reassurance (when the experimenter left the room and participants were consequently unable to ask for reassurance) lead to increased washing time, and trustworthy reassurance lead to greater reductions in urges to seek further reassurance compared to superficial reassurance.

It is important to note that Kobori et al. (unpublished) experienced problems with the experimental manipulation, i.e. the stimulus applied did not increase participants' washing time or feelings of anxiety. However, Kobori et al. as well as Parrish and Radomsky (2011) are both good attempts to experimentally examine the function of excessive reassurance seeking. In some sense, the field is still struggling to come up with an experimental design where a perception of threat and anxiety is triggered as well as a real urge to seek reassurance. Is this possible? The author feels that the answer is 'yes...but it is complicated'. It would be interesting to carry out an

experiment where non-clinical participants are deceived to believe that they are somehow 'evil' or have done something 'inappropriate' or 'wrong', in order to mimic OCD sufferer's mental state followed by manipulations of the availability of reassurance.

Chapter 8:

Final Discussion

This thesis has examined excessive reassurance seeking (ERS) from a cognitive and behavioural perspective in line with the theoretical perspectives set out by Salkovskis (1985, 1991, 1996b, 1999) and Rachman (2002). Both Salkovskis and Rachman conceptualise ERS as a form of safety-seeking behaviour, more specifically an obsessional checking behaviour, where the main difference between physical checking and ERS lies in the fact that it has a major interpersonal aspect. In other words, reassurance seeking is an interactive process between people, in contrast to other checking behaviours which typically take place when the person is alone. It is suggested here that this interpersonal component does not only reduce the perception of threat but also disperse feelings of responsibility for danger onto the 'reassurer'; "a trouble shared is a trouble halved" (Kobori & Salkovskis, 2013). Both Salkovskis and Rachman hypothesise that ERS shares the same functional and long-term characteristics as compulsive checking and other safety-seeking behaviours: it prevents disconfirmation of the threat related belief and is at best only a temporary solution (if not counter-productive). Several converging lines of evidence provide support for this hypothesis.

To this theoretical perspective, this thesis has added two important qualifiers:

Firstly, in line with the normalising emphasis of cognitive theory, it is proposed here that seeking reassurance as a way of dealing with emotional distress and threat is a developmentally appropriate behaviour in children, which usually diminishes substantially as people make the transition into adulthood and are able to self-regulate both the perception of threat and their emotional responses to these. Although reassurance seeking decreases in frequency as people progress through life, it still functions as a helpful mechanism which people rely on and others often happily provide. Although this is theoretically important and underpins some aspects of the rationale for the present research, the author has not sought to investigate it directly.

Secondly, and the subject of direct investigation here, reassurance was differentiated from support and the findings offered here have added to the empirical understanding of this important distinction. A caring person typically responds to someone's distress either by telling the person that their fears are unjustified and that there is nothing to worry about and more importantly, empathically identifying the distress itself as being the issue and helping the person to recognise this and to deal with the distress rather than the perception of threat. When this second component dominates, note that there is no dispersion of responsibility. Support seeking of this type is best considered to be the hallmark of mature emotionally sustaining relationships. It is proposed that the balance between support seeking and reassurance seeking becomes

distorted in people who suffer from anxiety problems. Similar to all other safety-seeking behaviours, this reaction has the potential to be highly counterproductive, that is, instead of 'fixing' the anxiety, it maintains it; the solution becomes the problem (Salkovskis, 1991, 1996b; Salkovskis, Clark, et al., 1999; Salkovskis et al., 2007).

Although diagnostically (in particular DSM) the discussion of excessive reassurance seeking has been confined to a small number of problems (especially health anxiety and less directly to OCD), there is growing evidence that excessive reassurance seeking is a transdiagnostic phenomenon (Cougle et al., 2012; Kobori & Salkovskis, 2013; Parrish & Radomsky, 2010; Rector et al., 2011). The present thesis has defined excessive reassurance seeking and contrasts it with a definition of support, then addresses some key questions about the concept from four different perspectives (i.e. non-clinical samples, sufferers of anxiety problems, caregivers and therapists). The focus is on what motivates people to seek reassurance, what it consists of and how it functions. This is extended to consideration of the extent to which there are diagnosis specific issues in both OCD and health anxiety which interlock with the transdiagnostic factors noted more generally in other diagnoses and in those without a clinical diagnosis. Engendering support as an alternative to reassurance in Cognitive Behavioural Treatment for emotional disorders is discussed.

The phenomenology of excessive reassurance seeking and provision

The first study in the present thesis considered the interpersonal components of ERS by applying an in-depth analysis using qualitative methods in the context of an interview of those who provide reassurance, that is, caregivers of OCD sufferers. The interview identified the caregivers' experiences of reassurance; topography and motivational factors; the process of seeking and giving reassurance; the effects and consequences of giving or withholding reassurance; and finally, their own intentions when giving reassurance. The pervasive theme here was the experience of frustration in the face of excessive reassurance seeking.

Consistent with Kobori et al. (2012), the importance of threat perception as a motivating factor for ERS was identified, together with the idea that caregivers are commonly required to provide reassurance in a certain (correct) way for it to work. Failing this typically meant that further reassurance was sought from them. Caregivers understand that providing reassurance is only a short-term solution. In addition, caregivers feel that reassurance seeking puts strain on them, impacts negatively on their quality of life and causes relationship problems with the sufferer. However, they consider that they have no choice but to comply with requests for reassurance. The question that then follows is: why give it if they know it makes OCD worse in the longer term? It seems that providing reassurance is 'helpful on the day', it makes it possible for both themselves and the OCD sufferer to move on and possibly focus their attention on something

different and more meaningful. Any other response will cause escalating problems, which would mostly end in giving reassurance in any case.

When both sufferer and carer perspectives (i.e. findings from the Kobori study and the present study) are compared, one of the prominent differences that emerge is how much attention and detail OCD patients expect from their caregivers as part of the process of reassurance seeking and its provision. That is, OCD sufferers want their caregiver to give them full attention and provide reassurance in a detailed, specific and the correct way for it to have its desired impact.

Unsurprisingly, the importance of these factors was not emphasised by the caregivers in the study presented here; quite the opposite. Instead they almost invariably reported feeling frustrated as a result of being persistently asked to provide reassurance; the greater the detail that was required of the carer and the greater the frequency of reassurance seeking, the greater the frustration was likely to be. Frustration can be understood as an emotional response to situations which the person perceives as out of his or her control. In other words, they feel completely stuck. In any given situation it seems it is only a matter of time until they give into the request for reassurance.

Both the Kobori study and the first study of this thesis focused primarily on OCD; the second study therefore examines the diagnosis specific and transdiagnostic elements of the behaviour.

Excessive reassurance seeking is considered in both OCD and health anxiety. A striking quantitative finding emerged from the qualitative component of this mixed-methods study. Only three out of ten health anxious participants reported seeking support within the context of their emotional problem in contrast to nine out of ten participants from the OCD sample. By and large there were more similarities than differences when excessive reassurance seeking was examined in these two disorders. This was particularly true when the topography of the behaviour was examined. However, shared topography does not necessarily indicate shared function.

Differences were evident when the components of excessive reassurance seeking were disentangled in the framework method analysis, falling into three main components; the *seeking* of reassurance; the *provision* of reassurance; and the *processing* of reassurance. Each component can be further divided into lower level factors depending on the context reassurance is sought. As an example, findings indicated that the dispersion of responsibility and an urge to obtain certainty seems more relevant to OCD than health anxiety. Also, both groups reported believing that there was an ideal way to reassure them, but the form of this was dependent on diagnosis. The ideal provision of reassurance within the context of health anxiety typically involves a doctor and medical tests, whereas OCD sufferers were much less focused on seeking expert advice and put more emphasis on details of the process, such as facial expressions and tone of voice of the person providing the reassurance. In addition, although both groups described feeling much worse when they were unable to get reassurance, the OCD patients described a wider range of

emotional responses. Interestingly, the provision of reassurance also seems to have more positive effects (in terms of changing how people feel emotionally) in the presence of OCD as opposed to health anxiety. These findings are clinically relevant and a critical reminder about the importance for examining intentionality.

The qualitative studies also give an important insight into what can happen when reassurance is withheld from someone who suffers from OCD or health anxiety. Unsurprisingly, the sufferer feels worse and more reassurance is typically sought – not the opposite. From a behavioural perspective withholding reassurance should lead to extinction by a process of non-reinforcement, unless (as in this case) a reinforcement schedule is in operation. Those who work with chronic and severe OCD are familiar with the fact that in some instances people's relationships are consumed with reassurance seeking and giving; all their conversations have reduced to this interaction. By taking away the reassurance, there are no conversations left to have. In addition, clinical experience and findings presented here tell us that withholding reassurance can set off a particularly strong and negative emotional and/or behavioural response including reactions such as aggression and/or self-harm. A relevant finding comes from (Salkovskis & Kobori, in review) who recruited individuals suffering from OCD, panic disorder and healthy volunteers and asked them to rate the effects of reassurance on their emotional state under three conditions: (i) when they seek reassurance and it is not provided (no reassurance); (ii) immediately after reassurance is provided (short-term effect), and (iii) 20 minutes or more after they receive reassurance (long-term effect). Consistent with findings presented in this thesis, people suffering from OCD felt that reassurance was beneficial and a highly effective way in terms of decreasing feelings of anxiety and urges to seek further reassurance in the short-term. Although these positive effects diminished over the medium to longer term, they were still evident relative to the impact of not having reassurance. In other words, the provision of reassurance produces a better outcome, in terms of anxiety and urges to seek further reassurance, relative to not receiving reassurance. The authors of the study concluded that for people suffering from anxiety disorders, seeking reassurance is the right thing to do in the absence of any helpful alternative. By extending this finding to caregivers, it seems only logical to recommend to them to provide reassurance, as opposed to withhold it, when they have no other option available to them.

The question that then follows must be: 'What is a helpful alternative to reassurance, both the seeking of it and its provision?' It has been argued here that the issue of *support* is particularly important because this is clearly something that therapists seek to provide within the context of treatment and the author believes they should in principle help patients to make the transition to seeking support as opposed to reassurance.

The next study therefore focused on therapists' perception and understanding of excessive reassurance seeking. This study sought to benchmark qualified clinicians working in routine clinical practice with varying degree of experience against international expert consensus drawn from leading clinical researchers. In most instances qualified therapists working in routine clinical practice did not deviate greatly from the experts. All participants associated reassurance with a range of emotional problems as opposed to restricting it to health anxiety like the DSM manual suggests. There was some evidence that clinical experience right up to the expert level probably resulted in less reassurance giving within treatment settings and experts seemed better in associating ERS with anxiety disorders, but there were enough inconsistencies between the experts and other participants to suggest that excessive reassurance seeking remains poorly understood and is not consistently dealt with clinically. This is particularly in relation to treatment where it seems that all therapists, no matter their experience, seem to consider it part of CBT for ERS to encourage carers to stop giving reassurance, rehearse with the carer ways of responding without giving reassurance, and strongly instruct their patients to stop seeking any reassurance, all in concordance with ERP principles. This finding suggests that there is considerable room for improvement for current treatment guidelines.

The issue of therapeutic intervention in severe and persistent reassurance seeking was illustrated in detail using a single case experimental design with an older adult suffering from severe and chronic OCD. The participant had a history of relapsing following partially successful CBT. However, previous treatments had one thing in common, namely, they had not dealt with his excessive reassurance seeking; a behaviour, which he had heavily relied on for decades to deal with his contamination fears. The main conclusions from that study were that a cognitive behavioural treatment that focused on treating excessive reassurance seeking could have beneficial effects. The study highlights the importance of assessing the role of reassurance seeking in maintaining OCD, in particular where there is a history of relapse following successful CBT treatment. This study forms part of limited but growing (e.g., Abramowitz, Baucom, Wheaton, et al., 2013) evidence base for helping sufferers of OCD engage in helpful interpersonal behaviours such as support seeking.

The final study sought to bring together the findings from the previous studies and more broadly tackle the diagnosis specific/transdiagnostic issues by considering excessive reassurance seeking in clinical samples of people suffering from OCD, health anxiety, social phobia, panic disorder or generalized anxiety disorder, with a view to considering the extent to which excessive reassurance seeking is transdiagnostic as opposed to disorder specific. Findings suggested that reassurance seeking represents a final common pathway of multiple processes; where some processes appear transdiagnostic while others may indicate disorder specificity. Consistent with

one of the assumptions of the thesis, the findings indicated that this is a behaviour that everyone - not only anxiety sufferers - engage in, but the extent and function of the behaviour is different in anxiety problems as opposed to non-clinical samples. With regards to disorder specificity, excessive reassurance seeking seems to be greater in OCD and health anxiety as opposed to other anxiety disorders. In addition, people suffering from OCD and health anxiety appear to seek it more frequently and more extensively. They also respond differently relative to other anxiety sufferers after getting or not getting reassurance. Also, their intentions or aims when they seek reassurance are different - they are more focused on various details of the process, such as how reassurance is provided to them, by whom or by what authority.

However, when ERS is examined only within the context of OCD and health anxiety, findings revealed a mostly shared function and very limited disorder specificity. Individuals with OCD report finding it harder than people who suffer from health anxiety to resist engaging in reassurance seeking and experience more frustration and annoyance as a result of both seeking reassurance and being provided it and also when reassurance is withheld from them.

Overall, the work conducted has shown considerable convergence between the reaction of those who seek reassurance in the context of OCD and those who are asked to provide it; that health anxiety and OCD differ not so much in reassurance issues, but in the extent to which support is deployed as an alternative, and that some reassurance seeking is evident across the anxiety disorders. It is argued here that it is unlikely that there are no differences between OCD and health anxiety, but rather that the focus of these studies need to be more finely grained in order to definitively identify similarities and differences in function and therefore potential treatment strategies.

Is there room for more specificity? Antecedents and Consequences

What still remains unclear is whether the processes that underpin the behaviour, including the antecedents and consequences, are truly transdiagnostic. It is now clear that the questionnaire, which was specifically developed for this study, did not examine these factors such as the dispersion of responsibility, effects of different kinds of reassurance (e.g. assisting rituals vs. verbal answer and also 'expert' reassurance vs. non-expert), failure of getting reassurance, in sufficient detail.

Salkovskis (1996b) proposes that responsibility factors (antecedents) have some overlap between OCD and health anxiety, but with some important differences in focus. Obsessional patients seek to disperse responsibility of *harm* to others when they seek reassurance, whereas responsibility factors within the context of health anxiety are less broad and more or less focused on the

person's health and medical consultations where the individual intends to draw the attention of others to his or her physical state to allow for the *detection of abnormality*. If this is true and we assume that the transfer of responsibility is a motivational factor in OCD and health anxiety, it implies *a priori* theoretical difference in specificity for reassurance seeking. Although the second study of the thesis identified this difference in specificity to some extent, the final study offers little evidence to either refute or support this view since the questionnaire items were not specific enough to tap into this. Thus, it still remains unknown if this difference in specificity between OCD and health anxiety truly exists. Accordingly, it would be interesting if future investigations focused on examining in more detail whether certain antecedents or beliefs are diagnosis specific in relation to, for example, the maintenance of excessive reassurance seeking. It may also be that a semi-idiographic methodology is required. At a gross level there is emerging evidence that in health anxiety, but not OCD, reassurance is particularly prominent in the context of medical consultations and related situations (Salkovskis and Wroe, unpublished); this may at least in part explain why support seeking seems to be mostly absent in this group. However, there are almost certainly more fine-grained logic of links between beliefs and behaviours, i.e. why people decided to engage in or not engage in reassurance seeking at a particular moment, even within diagnostic groups that may explain this finding further. This can clearly be seen in panic disorder, which is generally accepted to be particularly homogenous in these terms, but where there is reasonable evidence of belief-behaviour links (Salkovskis et al., 1996). In OCD and health anxiety it may be that such a fine-grained analysis is needed to pin down the differences.

Another potential difference in specificity between disorders (not necessarily confined to OCD and health anxiety) might be related to the *perceived consequences* of excessive reassurance seeking. For example, the persistence of the behaviour might have different consequences, depending on the emotional problem, both for sufferer and his or her caregivers. Findings from studies presented here indicate that excessive reassurance seeking triggers strong feelings of frustration in caregivers within the context of OCD. However, we currently do not know if frustration is equally important in health anxiety, although it seems likely based on clinical experience of carers involved with these patients. It may be that the egosyntonic nature of health anxiety and the fact that most people can relate to health worries results in something different. Furthermore, if we assume that ERS is a form of safety-seeking behaviour in line with Salkovskis (1991) conceptualisation, then by definition it follows that there are several consequences that follow from ERS. When people believe they are under threat it makes perfect sense for them to act in way to make them safer. Such a response is generally considered adaptive to *real* threat. However, if the perception of threat is based on a misinterpretation, then the safety-seeking behaviour has problematic consequences and comes at a cost. At best they may offer some short-term reduction in anxiety but they are particularly problematic since they prevent the individual

from learning that their fears are groundless. After the event has passed, the individual explains the 'near miss' by his own actions, that is, by the deliberate use of safety-seeking behaviours (Salkovskis, 1991; Salkovskis et al., 1996). In addition, safety-seeking behaviours can create the symptoms which people fear (Clark, 1999). For example, Olatunji et al. (2011) showed experimentally that when health anxious individuals actively engage in health-related safety-seeking behaviours they experience an increase in symptoms of health anxiety and avoidance – not the opposite. This is commonly seen in clinical settings where, for example, a person suffering from health anxiety has caused swelling in certain areas of his/her body (e.g. mole) due to their repeated poking and touching. The person then interprets the swelling as evidence for health problems; establishing a vicious cycle. Furthermore, given that excessive reassurance seeking is here conceptualised as a special type of checking behaviour, it is also possible that the repetitiveness of the behaviour has the same effect on people's memory as physical checking, that is, causes memory distrust. However, this remains to be examined empirically although there is growing evidence for such an effect within the context of physical checking both with compulsive checkers diagnosed with OCD and non-clinical samples (see further Radomsky & Alcolado, 2010; Radomsky, Dugas, Alcolado, & Lavoie, 2014b; van den Hout & Kindt, 2003b).

Interestingly, a lot more has been written specifically about the consequences of excessive reassurance seeking within the context of depression. Interpersonal consequences of excessive reassurance seeking, such as perceived social rejection, are thought to maintain this behaviour amongst people who suffer from depression (Coyne, 1976a, 1976b) whereas the same consequences may lead someone who suffers from OCD to decide to terminate the behaviour (Parrish & Radomsky, 2010). Coyne's (1976b) model of depression predicts that ERS in depression culminates in feelings of hostility and aversion in others that then leads to rejection of the person seeking the reassurance. This adds an extra dimension to the understanding of the behaviour with the inclusion of a component that focuses entirely on the person who provides the reassurance; to be more specific, what effect or consequences excessive reassurance seeking has on other people. Before discussing this further, it is worth highlighting that relatively few therapists from study 3 associated excessive reassurance seeking with depression, raising questions about whether reassurance seeking tends to go undetected in treatment settings. This finding is interesting when we consider the fact that historically most psychopathological research on excessive reassurance seeking has been conducted on its relationship to depression where Coyne's (1976a, 1976b) interpersonal model of depression has played a significant role. Coyne's theory explains how dysphoric or depressed individuals behave in a way that contributes to an interpersonal environment that can lead to or maintain depression. According to Coyne, important life events, such as loss of significant relationships can trigger the display of depressive symptoms. Initially, mildly depressed or dysphoric individuals turn to others for reassurance to

alleviate their doubts about their self-worth and whether others truly care about them. Initially, others respond with giving reassurance, which has the negative effect of reinforcing the display of depressive symptoms. Thus, further reassurance is sought but it offers little relief because the depressed individual again doubts the reassurer's sincerity and as a result further reassurance is sought, only causing more doubt and the pattern is repeated and a vicious cycle develops. Coyne argues that the persistent reassurance seeking and continued depressed mood leads to further negative *consequences* experienced by those who are close to the depressed individual - they become frustrated and irritated by the persistent requests for reassurance and start to withdraw. The depressed individual perceives this frustration (whether it is imagined or not) as a form of rejection, which further disrupts the depressed person's environment and maintains and/or worsens his or hers symptoms of depression (Coyne, 1976b).

Since its original publication Coyne's (1976b) theory has been extended and refined. Perhaps the most significant input in relation to excessive reassurance seeking and depression has come from Joiner and colleagues (Joiner, Alfano, & Metalsky, 1992; Joiner et al., 1999) who used Coyne's theory as a starting point to develop further ideas about the role of the behaviour in depression. Within this framework, ERS has been implicated as a risk factor for the development, maintenance and worsening of depression (Joiner & Katz, 1999; Joiner et al., 2001) and shown to predict interpersonal rejection and severity of depressive symptoms (see Starr & Davila, 2008 for a meta-analytic review). Quite confusingly though, Joiner et al. (2001) and Haefffel, Voelz, and Joiner (2007) who in some respect have been leading figures in exploring ERS within the context of depression, argue that excessive reassurance seeking constitutes a feature that is *specific* to depression over other mental health disorders such as anxiety disorders, schizophrenia and substance misuse. Based on clinical experience and research findings presented here and elsewhere (e.g., Coughle et al., 2012; Kobori et al., unpublished; Kobori & Salkovskis, 2013; Kobori et al., 2012; Parrish & Radomsky, 2010, 2011; Rector et al., 2011; Salkovskis & Warwick, 1986) this argument is simply incorrect. It seems to result from the author's narrow definition of the concept where they give no consideration to the threat related nature of excessive reassurance seeking typically seen in people suffering from anxiety problems (Coughle et al., 2012). Leaving aside this lack of conceptual clarity, it is of theoretical interest to draw the reader's attention to the functional differences that potentially exist for excessive reassurance seeking between depression and anxiety disorders. Based on the cognitive behavioural theory one would expect there to be identifiable diagnosis specificity given the differences in cognitive biases and beliefs between the disorders; a person suffering from depression will typically hold strong (often certain) negative beliefs that he or she is unlovable, worthless, or a failure (Beck, 1967; Beck et al., 1979); whereas anxiety focuses on the perception of threat and is future oriented where the person believes there is a risk of harm coming to himself/herself or others (Beck et al., 1985). Consequently, what

is being sought or what drives the behaviour, when reassurance is requested from another person, differs in depression as opposed to anxiety disorders. For example, person A who suffers from OCD and person B who suffers from depression, are from a cognitive behavioural perspective driven by different motivational factors when they seek reassurance, although the topography of the behaviour may be identical. For example, both person A and B may ask their partner: “do you really love me?... are you sure you do?...how do you know?”; but for different reasons. What underpins the reassurance seeking for the OCD sufferer is the belief that their partner truly does love them, but they want to make sure that this is true so they try to remove any elements of uncertainty or doubt by checking (i.e. seeking reassurance) with their partner that their belief holds true. In contrast, the person suffering from depression is mostly convinced that their partner does not love them anymore but they would like it not to be true. Thus, reassurance is sought with the intention to become less certain (or increase their doubt) that their negative belief about unlovability holds true.

In terms of “gross” differences, an examination of depression versus OCD and health anxiety (as well as other anxiety disorders) is warranted. Currently, an adapted version of the Reassurance Seeking Questionnaire, which includes questions about the function of reassurance seeking within the context of depression, is being examined on individuals suffering from depression and anxious groups. The findings will hopefully shed some light on whether the above mentioned theoretically driven functional differences truly exist. There is already some indication of this in qualitative research from Parrish and Radomsky (2010) who examined various factors, including the function of excessive reassurance seeking, within the context of anxiety and depression. They recruited individuals suffering from major depression, non-depressed OCD sufferers and healthy control participants and administered a semi-structured interview focusing on reassurance seeking and repeated checking. With regards to the function of ERS, results indicated that depressive reassurance seeking was primarily motivated to prevent social threats such as abandonment and loss of support whereas reassurance seeking within the context of OCD was aimed at preventing general harm, such as fire and theft.

Summary of Treatment Implications

Some of the implications of the proposed difference in terms of how ERS functions in different disorders concern treatment. It implies that, as well as examining carefully people’s intentions when they seek reassurance and what effect the behaviour has on other people, it is equally important to enquire about if and how people engage in other non-pathological interpersonal behaviours when they feel in danger. It seems obvious that a total lack of (or minimal) engagement in non-pathological interpersonal behaviours, such as support seeking, calls for a specific intervention aimed at helping people to change that. That is of course not always easy.

Prior to treatment, it is not unusual for patients to feel distressed about their beliefs, this is particularly true for obsessional problems where people often believe it in their heart that their thoughts mean that they are evil or dangerous and so on. Thus, the focus of cognitive behavioural treatment (particularly for anxiety problems) is typically on helping the person to construct and test a new, less threatening account of their experiences. This is often presented using an explicit or implicit theory A versus theory B approach, as discussed in previous chapters. For example, the person suffering from an obsessional washing problem is helped to shift their view from the idea that they are contaminated and at risk of harming other people unless they wash (theory A) onto the idea that their 'enemy' is not germs, instead what they suffer from is a specific problem which concerns *fears* of contamination (theory B) (Salkovskis, 1999; Salkovskis & Wahl, 2003). The latter explanation offers a non-threatening account of the sufferer's experiences and by definition calls for different responses to those experiences (e.g. intrusive thoughts). Thus, when the father who has intrusive thoughts about sexually abusing his children is helped to consider that it is not because he is dangerous, but because he loves his children so much and for understandable reasons is worried about the worst thing imaginable. It follows that, in order to feel less anxious about it, it is important that he stops reacting to his intrusions as if they are intrinsically threatening, for example, to discontinue seeking reassurance excessively from his partner that he is trustworthy and not an evil paedophile. He can, however, reasonably indicate that he is fearful and therefore in need of comfort and support with accepting his anxiety for what it really is. This framework, i.e. theory A versus theory B, can be applied to a range of emotional problems but has its origins in OCD (see further Salkovskis, 1999). Clinically you find that some sufferers of anxiety problems will quickly agree with the alternative account of their experiences and soon start decreasing and/or changing their responses to these, for example, by stopping seeking reassurance. There are of course also some sufferers who find this more difficult or believe that it is too risky to 'take the chance' of changing their thinking and behaving. Then there are those who fall somewhere between these two groups. Within the context of excessive reassurance seeking, a crucial treatment goal is to eradicate the *excessive and repetitive* nature of the behaviour. One of the most common suggestion made in the clinical literature is that the way to achieve this is for therapists to refrain from giving any reassurance while simultaneously advising patients to stop seeking it and caregivers to withhold it; all in accordance with the more behaviourally focussed exposure response and prevention protocols (e.g., Abramowitz et al., 2003; Clark, 2004; Marks, 2005; Rachman, 2002). That may of course work in skilled hands and from a behavioural perspective it should lead to an extinction of the behaviour. However, such an approach may also come at a great cost, particularly in cases where the anxiety problem is considered severe and/or longstanding. Thus, it has been argued in this thesis that there is a need for a more subtle approach for dealing with excessive reassurance seeking. Helping people to shift from seeking

reassurance to seeking support presented within a theory A versus theory B framework has here been identified as a helpful alternative. However, we are just at the beginning stages of making sense of and testing this treatment intervention. Further research is clearly needed to establish whether this approach or some elaboration of it can help us to treat more successfully emotional problems where excessive reassurance seeking forms part of the presenting problem.

Study Limitations and Future Directions

Future research needs to overcome the limitations that were identified chapter by chapter. These limitations were mostly related to sampling issues, use of non-standardized measures and the restrictions that result from the data analytic methods that were applied. All of these factors affect the generalizability of the findings. Some of these limitations can be dealt with by, for example, replications involving larger more representative samples; relying on a more detailed clinical assessment of participant's presenting problem/s; applying different measures for therapist competence in treating and understanding excessive reassurance seeking; and, there is a need for further validating the questionnaires that were specifically developed for this thesis.

Having taken into account these limitations, future studies should build upon and extend the findings presented here and examine excessive reassurance seeking more broadly, for example, by not restricting it to anxiety disorders. A future research programme could involve, as an initial step, a further evaluation of the Reassurance Seeking Questionnaire to ensure the construct validity and factor stability of the scale. The scale could then be examined using a broader clinical population with the hope of further identifying what factors are disorder specific and what factors can be considered transdiagnostic. With regards to the treatment of excessive reassurance seeking, additional piloting of the findings within clinical context is needed. Future studies should focus on disentangling further the different processes involved in ERS, examine them within clinical context using single case experimental designs. As an example, no empirical research has directly tested that it is unhelpful to give repeated reassurance, but helpful to withhold it and offer support instead. In addition, this type of study would provide the opportunity to contrast support seeking with the standard treatment intervention of exposure response prevention with habituation rationale (banning all reassurance seeking and allow for habituation of anxiety). A particularly intriguing experiment would be to examine whether excessive reassurance seeking functions in the same way as compulsive checking in OCD under the condition of spontaneous decay (Rachman, de Silva, & Roper, 1976). As previously discussed, Salkovskis (1985, 1999) and Rachman (2002) have proposed that excessive reassurance seeking represents a special case of obsessional checking but experimental analysis remains to be conducted. Thus, it would be interesting and theoretically relevant to apply and extend adaptation of the experimental analysis developed by Rachman et al. (1976). Kobori et al. (unpublished) were influenced by Rachman's

experimental paradigm when they examined the function of meaningful versus superficial reassurance in OCD. However, it would also be interesting to recruit OCD patients and compare the effects of Exposure Response Prevention (ERP) accompanied by a traditional habituation rationale (ERP-HR) with the effects of ERP delivered with a cognitive rationale (ERP-CR) where the participants are encouraged to either i) drop ERS or ii) make the transition from reassurance seeking to support seeking. This is markedly different from the exposure interventions as conducted in traditional ERP because the ERP-CR condition is presented within an explicit framework that shifts participants to cognitive processing of the validity of their beliefs about reassurance seeking. The findings from these studies could hopefully provide us experimentally with further information about the function of excessive reassurance seeking and identify what is essential and not essential when treating this complex behaviour. Having acquired a good understanding of what factors are important in its treatment, a logical next step would be to run consecutive single case series evaluating the fully adapted treatment intervention. A more long-term goal would be to implement this 'new' treatment intervention into a randomized controlled trial as a supplement.

Do the Definitions of Excessive Reassurance Seeking and Support Seeking hold?

In the introductory chapters of this thesis an attempt was made to define excessive reassurance seeking and support seeking in a way that could be applied transdiagnostically. Reassurance seeking was defined in the following way:

Verbal and/or non-verbal interaction with someone, who you perceive has access to potentially threat relieving information, with the intention of increasing your perceived sense of certainty of safety from harm

Based on this definition, it was argued that reassurance seeking could be *excessive* in at least three different ways. Firstly, when it functions as a safety-seeking behaviour and as such maintains the perception of threat as part of a vicious circle (Salkovskis, 1991); as such it is excessive in terms of its impact on the maintenance of anxiety and threat beliefs. Secondly, given that reassurance seeking is a purposeful and motivated behaviour, there is another layer of excessiveness which relates to how compulsions within the context of OCD can become excessive (Stott et al., 2010). In the early stages, sufferers of anxiety problems manage to resist urges to seek reassurance, but gradually the behaviour becomes 'overpracticed or proceduralized' where the meaning attached to the behaviour and the reason they started doing it has become obscured, forgotten, or dropped from awareness. Under such circumstances the behaviour is considered excessive because although the meaning may be 'hidden' the behaviour still functions as a safety-seeking behaviour intended to deal with the perception of threat and the associated

anxiety. The third sense, in which it can be excessive, is in a more indirect way, which is defined in terms of how it is impacting on other areas of the person's life rather than just the distress itself, such as the person's relationships, ability to work and ability to function in daily activities.

By way of contrast, support seeking was defined with reference to *coping with distress* as opposed to 'saving' the person from threat as we would expect for safety-seeking behaviours (Salkovskis, 1991):

Interpersonal behaviour, verbal or non-verbal, that is intended to get (or give someone) encouragement, confidence or assistance to cope with feelings of distress

Having conducted the research based on these definitions the question that follows must be: 'how do the definitions fare?' The results from the studies are in line with the idea that ERS is driven by the perception of threat and people engage in the behaviour to deal with the perception of threat and feel safer. The findings suggest that support seeking functions differently – in fact the opposite – it is non-pathological and based on the findings presented here people engage in support seeking to cope with their feelings of stress like the definition implies. Thus broadly speaking, the definitions hold, but some adjustments or changing may be appropriate for the definition of ERS. The definition of ERS seems to hold very well within the context of OCD, which is essentially where it came from. However, some of the findings presented in this thesis indicate that the 'need for certainty' as a motivating factor is one of the few areas where the impact is greater in OCD relative to health anxiety. Further research is needed to clarify this issue. The definitions were heuristic in the context of the studies in this thesis, and therefore can inform future research and clinical work. They can be applied transdiagnostically as opposed to being confined to a specific disorder or cluster of disorders. They are likely to be helpful in further attempt to conceptualize why people engage in reassurance/support seeking and opens up new ways of investigating these complex and important behaviours and to share such understandings with sufferers and their loved ones.

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APPENDICES

Chapter 3 Appendices

Appendix A

Semi-Structured Interview Schedule Examining Excessive Reassurance Seeking - Caregivers' Perspective

1: Description of ERS

- (1) What, in your opinion, is reassurance?
- (2) Is it good or bad to provide reassurance?
- (3) Are you asked for reassurance? [if s/he doesn't elaborate prompt]
 - When are you asked for reassurance? What seems to be a trigger?
 - How are you asked for reassurance?
 - How do you typically react?
 - How does the person look and feel when you give reassurance?
- (4) How often are you asked for reassurance?
- (5) Are you asked for reassurance repeatedly or just once? [if s/he doesn't elaborate prompt]
 - How long does it take until you stop giving?
- (6) How closely are you listened by the person? [if s/he doesn't elaborate prompt]
 - Do the person try to see your face to catch every nuance?
 - When you are giving reassurance, does the person question the content/quality of your reassurance?" do they tell you when the reassurance is 'good enough'?
- (7) Are you asked to do something for the person? [if s/he doesn't elaborate prompt]
 - Are you asked to perform rituals for the person?
- (8) Who do you think is most reassuring to the person? [if s/he doesn't elaborate prompt]
 - If the person had access to an expert of your concern, would the person seek reassurance rather than you?

2: Consequences

(9) How do you think the person feels when you give reassurance? [if s/he doesn't elaborate prompt]

- Does his/her anxiety decrease immediately after you reassure the person?
- If so, how long do you think the person feels better? When are you asked for reassurance again?

(10) If you did not give reassurance, what would the person do, how would the person feel?

(11) If you did not think seriously or looked casual, what would the person do, how would the person feel?

3: Relationship with the person

(12) Do you get angry, upset or disappointed after you are repeatedly asked for reassurance?

(13) How does the person feel for you? [if s/he doesn't elaborate prompt]

- Does the person feel sorry? Would the person try to stop asking?
- Does the person compensate for asking you for reassurance? (such as thanking you, being nice etc)

4: Subtle Reassurance

(14) Are you asked for reassurance in more subtle ways? [if s/he doesn't elaborate prompt]

- Have you noticed that the person try to seek reassurance in hidden ways?
- Have you been tricked into giving reassurance without noticing it?

(15) Have you noticed that the person tries to reassure him/herself? [if s/he doesn't elaborate prompt]

- Does the person mumble to him/herself, such as 'I'm going to be ok' 'It'll be alright'?

5: Motivational factors

(16) Why do you think the person seeks reassurance?

(17) Why do you think you give reassurance? [if s/he doesn't elaborate prompt]

- Do you think it can work only temporarily?
- If so, why give?

Do you have any ideas to cope without giving reassurance

Chapter 4 Appendices

Appendix B

Semi-Structured Interview - Excessive Reassurance Seeking and Support Seeking within the Context of Emotional Problems

Explanation for participant

Say:

We are interested in interviewing people that seek reassurance and support with the aim to further our understanding of these common behaviours and their perceived effects. Of special interest is to explore similarities and differences between Reassurance Seeking and Support Seeking. In order to enquire about these behaviours I would like to ask you, with your permission, a set of questions that relate to Reassurance Seeking specifically and then another set of questions that relate to support seeking specifically.

Check for understanding. If participant has no questions, then go to section A.

Section A – *Instruction: Participants will be informed the following sentences before the interview.*

Say:

- I would like to remind you that the interview is being recorded.
- The interview is likely to last about 60-90 minutes
- Please note that you can at any point decide to have a break or stop the interview and decide that you no longer wish to participate in this study.
- When answering the questions, I encourage you to elaborate further on your answers and avoid a simple yes and no response.

Check for understanding. If participant has no questions, then go to section B.

Section B. Semi-structured interview

Say:

I would now like to start the interview if that is alright with you. Have you got any questions before we start?

B-1: Description of Reassurance.

- What, in your experience, is reassurance seeking?

Say:

Thank you, that was very helpful. I would now like to discuss this with you a little bit further to make sure we both understand Reassurance Seeking in the same way. So the idea here is for us to come up with a definition we both agree on.

In the context of this interview, when we talk about reassurance seeking we are referring to situations where you are trying to get a response from somebody with the aim to reduce your doubts or fears).

Agreed definition:

Say:

For the rest of the interview we are referring to this definition when we talk about Reassurance Seeking.

Say:

What I would like to do now is try to work out what happens when you seek reassurance. I want to focus on a situation that happened recently where you sought reassurance from someone in the way we have already talked about (REMIND PARTICIPANT IF NECESSARY). I am especially interested in any examples of when you felt distressed and someone provided you reassurance after you sought it. We have seen that some people find it painful to share these experiences, so you do not have to share it with me if you prefer not to.

Do you have any recent examples that come to your mind? Yes/No (Give plenty of time here).

If “no”: prompt for ideas and give encouragement and then go to next question.

If “yes” continue interview:

Do you find that this example is a typical one of your reassurance seeking behaviour?

If “no”:

Get client to think of a typical one and that also caused great distress and then continue.

If “yes”:

Can I please take a rating of the clarity of the memory (0 not clear at all; 100 extremely clear and a detailed recollection)?	0	10	20	30	40	50	60	70	80	90	100
How anxious did you feel at that time (0 not at all anxious; 100 extremely anxious?)	0	10	20	30	40	50	60	70	80	90	100
How depressed did you feel at that time (0 not at all depressed; 100 extremely depressed?)	0	10	20	30	40	50	60	70	80	90	100

If “yes”:

Can I ask, would you feel comfortable sharing this example with me? *If this example is good - then go straight to page 4 and ask client to answer the questions with this example in mind.*

If “no”:

I wonder if you could please think of an example that would be ok to share with me. You do not have to tell me all the details of it. The reason for why I ask is because the following questions all relate to your reassurance seeking behaviour and I just want to clarify with you that your example fits to the definition of reassurance seeking we agreed on earlier (this must also be an example of when you felt distressed and sought reassurance from someone and that person provided you reassurance).

After few examples have been identified, the client is asked to bring back to his mind the most distressing example (the one he/she did not want to share) and answer the following questions.

B-2: Reassurance Seeking – specific example

Say: First we are going to talk about what happened before you actually sought the reassurance.

Ask:

- (1) Can you tell me how this situation affected you? Prompt: How about emotionally? Behaviourally? Physically?
- (2) At that time, why was it important to seek reassurance? (Additional prompts if necessary: What were you hoping to achieve? How were you hoping the other person would react?)
- (3) Before you sought the reassurance, did you already know how the person would react or say?

- (4) At that time, did you find it hard to resist seeking reassurance? If yes, why?
- (5) At that time when you sought reassurance, what did you think might have happened if you had not sought reassurance?
 - a. And if that were to happen what was so bad about that? What was the worst thing that could have happened?
 - b. And if that were to happen (use response from a) what was so bad about that? What is the worst thing that could have happened?
 - c. Repeat until no more 'threats' can be extracted.

Say: Now I would like you to focus on the time when you sought the reassurance

Ask:

- (6) How did you seek reassurance in that situation? Prompt: did you ask, look etc.?
- (7) How did the other person actually react to your request for reassurance? Was it helpful? If yes/no why?
- (8) What did you do while the person was reacting to your request for reassurance? Prompt: Listen carefully, repeat in own mind, get person to repeat etc.
- (9) Did getting the reassurance have any impact on the way you felt? How long did it last? Did it satisfy your need for reassurance or did you need some more?
- (10) When you were seeking reassurance:
 - Did it relate to a need to feel less responsible?
 - Did it relate to a need to feel 'just right'?
 - Did it relate to a need to make sure others would not reject or withdraw from you?
 - Did it relate to a need to be/feel more certain?
 - Did it relate to a need to be/feel less uncomfortable?
 - Did it relate to a need to be/feel perfect?

Can you please tell me what of the above is most important to you? (Get rank order of 3).

Section C: Reassurance Seeking in General?

Say:

Now I would like to ask you a series of questions that relate to your reassurance seeking in general, so no longer focusing on the above mentioned example. The aim here is to get a good overall idea of your reassurance seeking behaviour. As a reminder, when we talk about reassurance seeking we are referring to – look up definition agreed on earlier!

C-1: General questions about reassurance seeking

Ask:

- (11) Why do you think you seek reassurance?
- (12) How often do you seek reassurance? Constantly, few times a day etc.
- (13) How do you typically seek reassurance?
- (14) When are you most likely to seek reassurance? (prompt: Are there any specific concerns/thoughts/doubts/feelings/bodily symptoms that make you more likely to seek reassurance?) What kinds of things do you typically seek reassurance for? Is it usually the same kinds of things?
- (15) Do you find it hard to resist seeking reassurance? If yes, why? Does your reassurance seeking ever feel out of control? Please tell me more.
- (16) Can you describe to me how you typically feel just before you seek reassurance?
- (17) Can you describe to me how you typically feel just after getting reassurance?
- (18) What makes you to stop seeking reassurance?

C-2: Who/what is most reassuring?

Ask:

- (19) Who do you typically seek reassurance from? Why them?
- (20) Is there an ideal way to reassure you? Can you please describe that?
- (21) Have you got any rules set up to control your reassurance seeking? If yes, what are these rules?
- (22) Is there anything specific you do while being reassured? E.g. listen carefully, read people's faces.
- (23) Are you usually fully aware beforehand how the person will react/say to your reassurance seeking? If yes, why ask?

C-3: Consequences of Reassurance Seeking

Ask:

- (24) Are there any disadvantages to seeking reassurance?

Say: Sometimes people say that it is not a good idea to seek reassurance and it is not helpful.

Ask:

- (25) Have you ever been told that? Do you know why they might say that?

C-4: Other's and Reassurance Seeking

Ask:

- (26) How do others usually react when you seek reassurance from them? Prompt: Do they get angry, upset, frustrated or disappointed?
- (27) Why do you think others reassure you?
- (28) What impact does it have on your relationship with that person in the short-term? And the long-term?

C-5: When Reassurance fails

Ask:

- (29) What happens if the person does not reassure you in the way you want? What effect does it have on how you feel?
- (30) If you cannot seek reassurance from others, how do you feel and what do you do?

C-6: Self-Reassurance

Ask:

- (31) Do you try to reassure yourself? If so, how? How is that different from how you typically seek reassurance from other people?

C-7: Subtle Reassurance

Ask:

- (32) Do you try to seek reassurance from others without them noticing or seek it in 'hidden ways'? Prompt here and give examples.

PART D

The Reassurance Seeking Attitude Scale

I would now like to ask you to answer a brief questionnaire that related to your reassurance seeking behaviour. Please read each statement carefully and decide how much you agree or disagree with it. Simply keep in mind what you are like most of the time. There is no right answer or wrong answer to these statements.

		I did not believe this idea at all										I was completely convinced this idea was true													
		0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
a)	I seek reassurance to feel less responsible	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
b)	I seek reassurance to make sure I have done everything perfectly	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
c)	I find it hard to stop seeking reassurance until I have an internal feeling that is ‘just right’	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
d)	I seek reassurance to prevent people from withdrawing from me	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
e)	I seek reassurance to try to make sure that people care about me	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
f)	Seeking reassurance is always helpful	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
g)	I seek reassurance to feel less uncomfortable	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100
h)	I seek reassurance to increase my levels of certainty	0	10	20	30	40	50	60	70	80	90	100			0	10	20	30	40	50	60	70	80	90	100

PART E

SUPPORT SEEKING

Say:

Now I would like us to shift our attention to Support Seeking. What I would like to do now is try to work out where the difference between support seeking and reassurance lie. So to be clear, I no longer want you to refer to our definition of reassurance.

Have you got any questions before we continue?

- What, in your experience, is Support seeking?
- In your experience, how is Support Seeking different from Reassurance Seeking?

Say:

Thank you, that was very good. Just like we did for reassurance seeking, I would like for us to come up with a definition for support seeking we both agree on. (When we talk about support seeking we are referring to situations where you try to get someone to give you encouragement, confidence or to assist you to cope with your distress).

Come up with a definition collaboratively:

Say:

For the rest of the interview we are referring to this definition when we talk about Support Seeking.

What I would like to do now is try to work out what happens when you seek support and see how that is different to when you seek reassurance. I want to focus on a situation that happened recently where you sought support from someone in the way we have already talked about (REMIND PARTICIPANT IF NECESSARY). I am especially interested in any examples of when you felt distressed and someone provided you support after you sought it.

Do you have any recent examples that come to your mind? Yes/No (Give plenty of time here).

If “no”: prompt for ideas and give encouragement and then go to next question. If “yes” continue interview:

Do you find that this example is a typical one of your support seeking behaviour?

If “no”:

Get client to think of a typical one and that also caused distress and then continue.

If “yes”:

Can I please take a rating of the clarity of the memory (0 not clear at all; 100 extremely clear and a detailed recollection)?	0	10	20	30	40	50	60	70	80	90	100
How anxious did you feel at that time (0 not at all anxious; 100 extremely anxious?)	0	10	20	30	40	50	60	70	80	90	100
How depressed did you feel at that time (0 not at all depressed; 100 extremely depressed?)	0	10	20	30	40	50	60	70	80	90	100

If “yes”:

Can I ask, would you feel comfortable sharing this example with me? *If this example is good enough then go straight to page 10 and ask client to answer the questions with this example in mind.*

If “no”:

I wonder if you could please think of an example that would be ok to share with me. You do not have to tell me all the details of it. The reason for why I ask is because the following questions all relate to your support seeking behaviour and I just want to clarify with you that your example fits to the definition of support seeking we agreed on earlier (this must also be an example of when you felt distressed and sought support from someone and that person provided you support).

After few examples have been identified, the client is asked to bring back to his mind the most distressing example and answer the following questions focusing on that example.

F: Support Seeking- specific example

Say: First we are going to talk about what happened before you actually sought the support.

Ask:

- (1) Can you tell me how this situation affected you? Prompt: How about emotionally? Behaviourally? Physically?
- (2) At that time, why was it important to seek support? (Additional prompts if necessary: What were you hoping to achieve? How were you hoping the other person would react?)
- (3) Before you sought the support, did you already know how the person would react or say?
- (4) At that time, did you find it hard to resist seeking support? If yes, why?
- (5) At that time when you sought support, what did you think might have happened if you had not sought support?
 - d. And if that were to happen (use response from Question 11) what was so bad about that? What was the worst thing that could have happened?
 - e. And if that were to happen (use response from a) what was so bad about that? What is the worst thing that could have happened?
 - f. Repeat until no more 'threats' can be extracted.

Say: Now I would like you to focus on the time when you sought the support

Ask:

- (6) How did you seek support in that situation? Prompt: did you ask, look etc.?
 - (7) How did the other person actually react to your request for support? Was it helpful? If yes/no why?
 - (8) What did you do while the person was reacting? Prompt: Listen carefully, repeat in own mind, get person to repeat etc.
 - (9) Did getting the support have any impact on the way you felt? How long did it last? Did it satisfy your need for support or did you need some more?
 - (10) When you were seeking support:
 - Did it relate to a need to feel less responsible?
 - Did it relate to a need to feel 'just right'?
 - Did it relate to a need to make sure others would not reject or withdraw from you?
 - Did it relate to a need to be/feel more certain?
 - Did it relate to a need to be/feel less uncomfortable?
 - Did it relate to a need to be/feel perfect?
- Can you please tell me what of the above is most important to you? (Get rank order of 3).

Section G: Support Seeking?

Say:

Now I would like to ask you a series of questions that relate to your support seeking in general, so no longer focusing on the above mentioned example. The aim here is to get a good overall idea of your support seeking behaviour. As a reminder, when we talk about support seeking we are referring to – look up definition agreed on earlier!

G-1: General questions about support seeking

Ask:

- (11) Why do you think you seek support?
- (12) How often do you seek support? Constantly, few times a day etc.
- (13) How do you typically seek support?
- (14) When are you most likely to seek support? (prompt: Are there any specific concerns/thoughts/doubts/feelings/bodily symptoms that make you more likely to seek support? What kinds of things do you typically seek support for? Is it usually the same kinds of things?
- (15) Do you find it hard to resist seeking support? If yes, why? What makes it so hard? Does your support seeking ever feel out of control? Please tell me more.
- (16) Can you describe to me how you typically feel just before you seek support?
- (17) Can you describe to me how you typically feel just after getting support?
- (18) What makes you to stop seeking support?

G-2: Who/what is most supportive?

Ask:

- (19) Who do you typically seek support from? Why them?
- (20) Is there an ideal way to support you? Can you please describe that?
- (21) Have you got any rules set up to control your support seeking? If yes, what are these rules?
- (22) Is there anything specific you do while getting support? E.g. listen carefully, 'read people's faces' etc.
- (23) Are you fully aware beforehand how the person will react or say to your support seeking? If yes, why ask?

G-3: Consequences of Support Seeking

Ask:

- (24) Are there any disadvantages to seeking support?

Say: Sometimes people say that it is not a good idea to seek support and it is not helpful.

Ask:

(25) Have you ever been told that? Do you know why they might say that?

G-4: Other's and Support Seeking

Ask:

(26) How do others usually react when you seek support from them? Prompt: Do they get angry, upset, frustrated or disappointed, or withdraw from you?

(27) Why do think you other's offer you support?

(28) What impact does it have on your relationship with that person in the short-term? And the long-term?

G-5: When Support seeking fails

Ask:

(29) What happens if the person does not support you in the way you want? What effect does it have on how you feel?

(30) If you cannot seek support from others, how do you feel and what do you do?

G-6: Self-Support

Ask:

(31) Do you try to support yourself? If so, how? How is that different from how you typically seek support from other people?

G-7: Subtle Support

Ask:

(32) Do you try to seek support from others without them noticing? Do you ever seek support in 'hidden ways'? Prompt here and give examples.

F-6: Extra questions

(33) Do you notice any differences in the way people react when you seek support from them vs. reassurance?

Chapter 4 Appendices

Appendix C

The Reassurance Seeking Attitude Scale

I would now like to ask you to answer a brief questionnaire that related to your reassurance seeking behaviour. Please read each statement carefully and decide how much you agree or disagree with it. Simply keep in mind what you are like most of the time. There is no right answer or wrong answer to these statements.

	I did not believe this idea at all											I was completely convinced this idea was true
a) I seek reassurance to feel less responsible	0	10	20	30	40	50	60	70	80	90	100	
b) I seek reassurance to make sure I have done everything perfectly	0	10	20	30	40	50	60	70	80	90	100	
c) I find it hard to stop seeking reassurance until I have an internal feeling that is 'just right'	0	10	20	30	40	50	60	70	80	90	100	
d) I seek reassurance to prevent people from withdrawing from me	0	10	20	30	40	50	60	70	80	90	100	
e) I seek reassurance to try to make sure that people care about me	0	10	20	30	40	50	60	70	80	90	100	
f) Seeking reassurance is always helpful	0	10	20	30	40	50	60	70	80	90	100	
g) I seek reassurance to feel less uncomfortable	0	10	20	30	40	50	60	70	80	90	100	
h) I seek reassurance to increase my levels of certainty	0	10	20	30	40	50	60	70	80	90	100	

Chapter 4 Appendices

Appendix D

Support Seeking Within the Context of Health Anxiety

For the HA group, thirteen subthemes emerged which were aggregated into five overarching themes. All themes are summarized in Table D. Figure D depicts the thematic map.

Table D Themes and Subthemes Drawn from the Qualitative Analysis for Support Seeking Within the Context of Health Anxiety

Overarching theme:	TOPOGRAPHY OF SUPPORT SEEKING
Subthemes:	<ul style="list-style-type: none">- <i>Absence of support seeking</i>- <i>The act of approaching others for advice or comfort when I feel bad</i>- <i>It is infrequent</i>- <i>Verbal and non-verbal form</i>- <i>Triggers</i>- <i>It is non-compulsive</i>
Overarching theme:	MOTIVATIONAL FACTORS - INCONSISTENCY
Overarching theme:	SUPPORT AS AN INTERACTIVE PROCESS
Subthemes:	<ul style="list-style-type: none">- <i>Simply listening to what people are saying</i>- <i>Seeking expressions of affection</i>
Overarching theme:	HELPFULNESS OF SUPPORT
Subthemes:	<ul style="list-style-type: none">- <i>It makes me feel better</i>- <i>It has a lasting effect</i>
Overarching theme:	INTERPERSONAL EFFECTS
Subthemes:	<ul style="list-style-type: none">- <i>It does not cause upset</i>- <i>It is appropriate</i>- <i>It strengthens the relationship</i>

*Note: Overarching themes are written in capital letters and **bold** and the subthemes are written in italic*

Thematic Map of Support Seeking within the context of Health Anxiety

The thematic map depicts the themes that emerged when the interview section on support seeking was analysed for the HA group. Overarching themes are presented in black rectangular shapes and subthemes in white rounded rectangular shapes. The three health anxious participants described support seeking as an act of approaching others for advice or comfort when they felt bad. Typically, this is something they did very infrequently and quite surprisingly only three participants out of ten engaged in this behaviour within the context of their emotional problem. They reported seeking support quite openly, as opposed to hiding it, and engaged in the

behaviour in a non-compulsive way. That is, they did not feel driven to seek support (like they did with reassurance). Although the participants could describe and define support seeking separately from excessive reassurance seeking there were lots of inconsistencies that emerged during the interviews. For example, in many instances they reported being driven by the same motivational factors when they seek support and reassurance. The HA participants typically found support seeking an helpful interaction, which typically involved them listening to what other people said to them in a non-obsessive way or seeking expression of affection. None of the participants felt that support seeking caused any interpersonal problems and overall it seemed to be a very helpful intervention when they felt distressed. Although it seems to be helpful, the participants very infrequently engaged in this behaviour - mostly because they thought that support seeking was much less effective, in terms of changing their worries or anxiety, in comparison with the seeking and provision of reassurance.

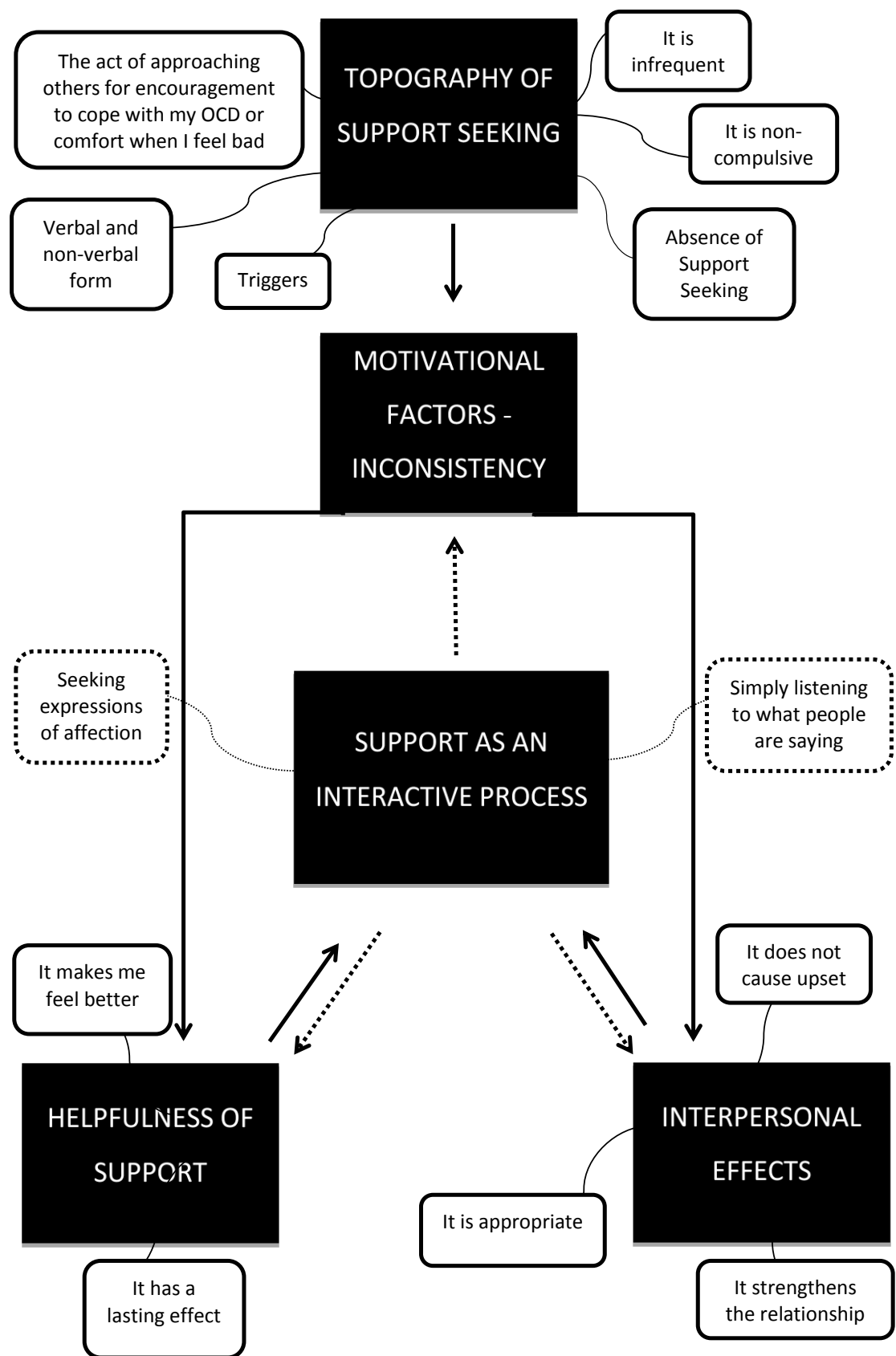


Figure D. Thematic map of support seeking within the context of health anxiety

Overarching Themes and Subthemes for Support Seeking Within the Context of Health Anxiety

TOPOGRAPHY OF SUPPORT SEEKING

This overarching theme is meant to reflect the HA group participants' descriptions of SS; what does the behaviour look like? They described it as a behaviour where they approached other people they trusted for advice or comfort when they felt bad. Most often this involved verbal behaviour where they would ask questions and/or share how they felt and/or ask for advice. Support can also be sought and provided non-verbally, for example, by approaching other's for physical comfort. The HA participants said that they usually sought support under circumstances where they experienced negative emotions, such as sadness or hopelessness. The participants did not find SS to be a compulsive behaviour, i.e. something they felt driven to do. In fact they quite infrequently engaged in this behaviour.

Absence of support seeking

Seven participants out of ten in the HA group could not identify any appropriate examples where they had sought support from someone when feeling anxious about their health. Their main interpersonal reaction to health fears was to seek reassurance and other's tended to provide them with it when requested. Further questioning revealed that, four participants (out of those seven) found it hard to differentiate support from reassurance, although two of them appeared to have some idea that the concepts referred to different things. For example, when **Participant 11** and **Participant 15** were asked 'what in your experience is support seeking?' they said:

Participant 11: *"....Erm... support seeking, ...erm... is I guess asking somebody to be on your side to look out for you, ...erm..., it's kind of similar, I think there's lots of similarities, it's quite difficult to differentiate between. Reassurance is more of an immediate response you are looking for whereas support is more of a long-term, personal kind of ...erm... gratification I guess."*

Participant 15: *"Ooo that's a tricky one. Would it be... ooo I don't know, that's quite a tricky questions. Support would be to help you through something? That would be I suppose how I would see it, to help you through a situation."*

Interestingly, **Participant 18** associated the dispersion of responsibility with support seeking which from a theoretical perspective means that she confuses it with ERS:

"Support seeking for me is somebody who will take that responsibility away, almost. Of, well of feeling, you know, feeling scared I suppose and yeah, that you know they'll take that responsibility and so I don't have to have it anymore."

The remaining two participants seemed to distinguish the two concepts in a sensible way, but nevertheless reported not engaging in the behaviour:

Participant 17: *"...[support] is more getting the sort of love and attention more than a reassurance of that I'm well or ok or not to worry about, or- support to me would be just the sort of moral- the rock being there for me."*

It should be noted that the 'absence of support seeking' remained as issue even after the researcher shared with the participants his definition of the concept and provided examples of SS. Thus, the absence is unrelated to some conceptual problems or disagreements. Further discussion revealed that participants felt that reassurance provided them almost an instant relief and in their opinion the provision of support was unlikely to do so. Thus, they did not engage in that behaviour. In addition, it appeared that their requests for reassurance were always (or at least most often) provided. This contrast between support and reassurance was for example illustrated by the following participants:

Participant 13: *"...[I] always [seek] reassurance because my anxiety goes through the roof, support would not be enough."*

Participant 15: *"When you feel that anxious you get completely locked into what you're feeling. And so you just want that quick response and I suppose the actual support that sort of, you know, can you make me feel better? I'm going to come to you specifically, I want you to tell me you love me or take me for a walk or whatever. That doesn't occur to me because I'm so locked into that anxiety feeling."*

The act of approaching others for advice or comfort when I feel bad

The three health anxious group participants who reported SS described it as an interpersonal behaviour where they approached people they trusted (quite openly) and shared with them how they were feeling emotionally and/or asked for "practical advice" (e.g., Ppt. 16) or physical comfort, as illustrated by **Participant 20**:

"Just go in not mentioning really not mentioning anything physical symptom-wise but just going in and saying 'Look I really, I'm going through the wringer at the moment, just give me a hug'."

Triggers

The HA group participants reported that their principal triggers of support seeking was a negative mood state. For example, Participant 14 talked about feeling vulnerable would trigger this behaviour:

"When I'm feeling vulnerable when I don't trust myself to look after myself, that's when I seek support. So when I feel like I just can't do it by myself anymore."

The remaining two participants described triggers as: "generally feeling unwell" (Ppt. 16); or "when I'm anxious [or] stressed...when it's not too bad" (Ppt. 20).

It is non-compulsive

In contrast to ERS, SS is not something the HA participants felt compelled to do or found hard to resist. Furthermore, if they were unable to get support they did not start obsessively looking for it. This is in contrast to what they did when reassurance was unavailable or withheld from them. For them, SS was a non-pathological behaviour; something they found proactive as illustrated by **Participant 14**, who said:

Participant 14: *I think it's something that I do as a proactive rather than as a reaction if you know what I mean.*

Finally, none of the HA patients felt that their SS behaviour was ever out of control.

It is infrequent

On average the HA participants reported seeking support approximately once or twice a week:

Participant 20: *"Not very often, not very often at all...once a week."*

Verbal and non-verbal form

In comparison with ERS, SS is much more open and direct as opposed to being hidden or subtle. Also, fewer sources are used to seek support from, for example, none of the HA participants reported using books, Internet or 'self-support' and mainly relied on people they trusted (typically family members or partners) for support. Similar to reassurance, support can be sought both verbally (Ppt. 16) and non-verbally as illustrated by **Participant 20**:

"I'll just go for a cuddle. And not mention anything just sort of, not say a word, not say how I'm feeling or anything like that. Go and have a cuddle, take two seconds, a deep breath, move on."

MOTIVATIONAL FACTORS – INCONSISTENCY

This overarching theme is meant to reflect the HA group participants' motivations for seeking support. A lack of consistency was evident to some degree across all three interviews. This refers to the extent to which participants were able to answer questions about SS without confusing it with ERS. At times, the boundaries between the two concepts became blurred. This was particularly evident when the participants were probed about what motivated them to seek support. In short, they reported being motivated by the same factors, i.e. when seeking support they were intending to deal with the perception of threat as opposed to getting help to deal with distress itself. This is interesting given that earlier in the interview these same participants had defined support seeking differently (and appropriately) from reassurance seeking. For example, **Participant 20** said that he sought support for the same reasons as reassurance:

"[I seek support] for the same reasons as reassurance really. To just to sort of gain comfort, basically. Again as I said looking for reassurance in a round-about way but just sort of to feel everything's going to be alright really."

For **Participant 16** and **Participant 14**, the main function of support appeared to be to deal with distress itself, as opposed to threat, but at various points during the interview they seemed to confuse support with reassurance, as the following quote from **Participant 16** illustrates:

"I tend to want to seek support because again it's this thing about wanting to know what's going on with my body. It's like this isn't normal and I'll talk to my mam and my dad as people who maybe can offer practical advice and they will- both of them have had more than the average person in terms of health problems that maybe- that I want to sort of ask them about how they think I should deal with this."

SUPPORT AS AN INTERACTIVE PROCESS

This overarching theme is meant to comprise what takes place during the process of support seeking. This mainly includes participant's attention processes and affective sensations while support is being sought, provided and responded too. In comparison with reassurance, something entirely different seems to take place during this process. It does not involve some predetermined set of 'rules' that need to be followed for support to work, i.e. there does not appear to be anything specific (e.g. tone of voice) that either needs to happen or not to happen for it to have the desired effect. This was evident in terms of how participants reported being 'present moment focused', where they would simply listen to what the other person was saying (or doing to them) without paying careful (obsessional) attention to facial expressions, body language and more. In addition, they emphasised the importance of seeking expressions of affection from the person asked to provide support.

Simply listening to what people are saying

Overall, participants described that during the process of SS they would simply listen to what was being said or done to them (e.g. cuddles). None of them described doing anything specific like reading people's faces or taking notes. For example, when Participant 20 was asked if he did anything, he simply replied: *"No, not really, no"*; and although **Participant 16** said that he tended to *"listen quite a lot"* to the person providing the support, he explained that: *"when I am seeking support there's like a calmness. So I'm more in control if that makes sense."*

Seeking expressions of affection

The three participants said that they ideally wanted someone to show them affection when they sought support. **Participant 16** talked about: *"cuddling, holding hands, while we talk, that sort of closeness"*. **Participant 14** highlighted the importance of feeling *"understood"*; and **Participant 20** talked about wanting someone to be nice to him:

“...[I want] just a hug really. That’s about- yeah just a hug, be nice to me.”

HELPFULNESS OF SUPPORT

This overarching theme reflects the HA group participants’ perceived helpfulness of SS, both in terms of their emotional state and the long-term development of their anxiety problem. Overall, SS helps to repair mood and the positive effects, which are associated with the behaviour, seem to have a lasting effect.

It makes me feel better

All three participants typically felt a positive change in their emotional state following the provision of support. One participant reported feeling much “calmer” (Ppt. 16); another participant reported feeling “happier” (Ppt. 20); and finally **Participant 14** said she felt uplifted:

“I think uplifted probably is the best way to [describe] because I feel then I’m not so alone. If I sit around feeling fragile I tend to feel very, very much alone whereas if I go out and seek support I remember there’s a network behind me that I can rely on and it’s okay to rely on them when I need to.”

It has a lasting effect

Overall the three participants reported that they would just continue feeling anxious or distressed (as opposed to their problems or worries escalating or becoming true) if they were unable to get support. This is in stark contrast to what the same participants typically predicted would happen if they were unable to get reassurance – under those circumstances they felt in more danger and started to feel emotionally much worse. Keeping in mind the short-term effects that are associated with the provision of reassurance, something different seems to be happening when support is provided; it appears to have a longer lasting effect (and as mentioned before none of the participants reported seeking it repeatedly or compulsively). For example, when participants were asked to describe a specific example where they felt distressed and were provided with support, two out of three said that asking for it once satisfied their needs and the positive effects lasted in that occasion “the rest of the day” (e.g. Ppt. 16) or “until the next day” (e.g. Ppt. 14). This (positive) effect was non-existent for reassurance.

INTERPERSONAL EFFECTS

Support seeking is an interpersonal behaviour which has an effect, both on the person seeking it, and also the person who provides it. This overarching theme reflects the (positive) interpersonal effects which the HA participants associated with SS. For example, they felt that it was an appropriate behaviour, i.e. something other people could relate too and understand – it is ‘normal’. At the same time it has the potential of bringing them closer to the other person, thus making their relationships stronger in the long-term. They also felt that SS did not make other

people feel upset (like reassurance typically did). In fact people were most often very happy to provide them support when needed.

It is appropriate

Two out the three HA group participants associated no disadvantages with SS; it is a normal human reaction and the appropriate thing to do when under distress. This was for example illustrated by **Participants 16** who said:

“...to me the seeking of support is different to seeking reassurance in the way that reassurance can become a crutch. You can become over-reliant on people which I am aware that I do. I think with support it’s just people talking and offering advice in the way that it could be about a problem with anything in life. I think support can only be a good thing. Which is why I’m really open about it, which is why I think I’m so open with my family in that respect.”

It strengthens the relationship

All three participants reported that SS had a positive effect on their relationships with the person who provided the support, both in the short- and long-term. For example, Participant 14 explained how SS would help to “*build trust*” in the relationship; and **Participant 16**, felt that support brought “*closeness*” into the relationship. Finally, **Participant 20** contrasted ERS with SS and explained how the latter would not only make himself feel better but also his partner:

“It improves [my relationship]. It’s going to be a positive thing whichever way you look at it, isn’t it. ...I think it makes her feel more probably more, you know, that I need her. And that she can do something for me as opposed to the flip side with reassurance seeking. Yeah it’s a positive thing whereas the reassurance seeking is probably a more negative because she quite often feels like, as I said, exasperated and frustrated that she can’t make me feel better. Whereas just giving me a hug... that’s easy isn’t it, you know, everybody can do it.”

It does not cause upset

From the transcripts it was evident that people typically responded quite positively to requests for support, opposite to what usually happened when reassurance was sought. None of the HA participants associated SS with negative feelings, that is, feelings such as anger, frustration or disappointment were not triggered either in themselves or in the person they approached for support. For example when the following participants were asked how other people responded they said:

Participant 16: *“Really openly, really proactively and positively.”*

Participant 20: *“Far more openly and positively than when I’m seeking reassurance from them.”*

Chapter 5 Appendices

Appendix E

Therapist Beliefs about Reassurance Seeking in Emotional Disorders

Demographic information

Please complete the following information about yourself:

Your current job title: _____

Your professional background (e.g. clinical psychology): _____

Your gender: ☐ Female ☐ Male

Your age: _____

Number of years in practice as a therapist post qualification (if still in training, please state this): _____

Which clinical or therapeutic model do you use most in your practice? Please choose only one:

- ☐ Behaviour therapy
- ☐ Cognitive therapy
- ☐ Cognitive behaviour therapy
- ☐ Counselling
- ☐ Eclectic
- ☐ Integrated
- ☐ Psychodynamic
- ☐ Psychiatric
- ☐ Systemic
- ☐ Other - please state: _____

How many clients with each of the following disorders as their main problem have you treated in the last 12 months? Please circle a category for each problem.

Body Dysmorphic Disorder	0	1-5	6-10	11-15	16-20	20+
Depression	0	1-5	6-10	11-15	16-20	20+
Eating Disorders	0	1-5	6-10	11-15	16-20	20+
Generalised Anxiety Disorder	0	1-5	6-10	11-15	16-20	20+
Health Anxiety (Hypochondriasis)	0	1-5	6-10	11-15	16-20	20+
Obsessive Compulsive Disorder	0	1-5	6-10	11-15	16-20	20+
Panic Disorder	0	1-5	6-10	11-15	16-20	20+
Personality Disorders	0	1-5	6-10	11-15	16-20	20+
Post-Traumatic Stress Disorder	0	1-5	6-10	11-15	16-20	20+
Psychosis	0	1-5	6-10	11-15	16-20	20+
Social Phobia	0	1-5	6-10	11-15	16-20	20+
Specific Phobia	0	1-5	6-10	11-15	16-20	20+
Substance Misuse	0	1-5	6-10	11-15	16-20	20+
Other Clinical Problems	0	1-5	6-10	11-15	16-20	20+

Please indicate, by ticking the boxes, if you think Reassurance Seeking is a common feature in the following disorders:

- | | |
|-----------------------------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> Body Dysmorphic Disorder | <input type="checkbox"/> Personality Disorders |
| <input type="checkbox"/> Depression | <input type="checkbox"/> Post-Traumatic Stress Disorder |
| <input type="checkbox"/> Eating Disorders | <input type="checkbox"/> Psychosis |
| <input type="checkbox"/> Generalized Anxiety Disorders | <input type="checkbox"/> Social Phobia |
| <input type="checkbox"/> Health Anxiety (Hypochondriasis) | <input type="checkbox"/> Specific Phobia |
| <input type="checkbox"/> Obsessive Compulsive Disorder | <input type="checkbox"/> Substance Misuse |
| <input type="checkbox"/> Panic Disorder | <input type="checkbox"/> Other Clinical Problems |

Therapist beliefs about Reassurance Seeking in Emotional Disorders

Please consider how much you agree with the following statements in relation to all ALL emotional disorders unless otherwise specified:

0—10—20—30—40—50—60—70—80—90—100

Don't agree at all

Agree completely

1. Giving reassurance usually forms a part of effective psychological treatment _____
2. Providing reassurance is an appropriate treatment technique _____
3. Giving reassurance is always helpful _____
4. There are negative effects of offering reassurance _____
5. Providing reassurance is an effective way to help my patients understand that they don't need to be worried _____
6. Reassurance seeking is a common problem in clinically anxious people _____
7. Providing of reassurance can alleviate my client's fears and doubts _____
8. I feel confident in managing repeated requests for reassurance from my patients _____
9. I should always offer my patients reassurance when requested _____
10. I feel frustrated when patients frequently seek reassurance from me _____
11. It is very important to be precise in the reassurance I offer to my patients _____
12. Requests for reassurance are attempts to reduce anxiety _____
13. I should never offer my patients any reassurance _____
14. Repeated provision of reassurance may contribute to the maintenance of emotional disorders _____
15. Clinically depressed individuals typically don't seek reassurance persistently _____
16. Subtle reassurance seeking tends to occur undetected in the course of therapy _____
17. Patients often feel guilty when they seek reassurance repeatedly from other people _____
18. Giving reassurance is particularly important when treating depressed individuals who seek it _____
19. Repeated requests for reassurance are a form of 'attention seeking' _____
20. Reassurance seeking is only problematic in some anxiety disorders _____
21. Repeated reassurance seeking is always problematic _____
22. Responding to repeated requests for reassurance may enhance depression in depressed individuals _____
23. Carefully planned reassurance can be helpful in treatment of anxiety disorders _____
24. Reassurance seeking is a common problem in clinically depressed people _____
25. When a patient asks me for reassurance about their fears, it can have the effect of increasing my own feelings of doubt _____
26. Seeking reassurance reduces uncertainty for the patient _____
27. It is pointless to offer reassurance _____
28. Patients are aware that repeatedly seeking reassurance can strain and drain other people _____

		0—10—20—30—40—50—60—70—80—90—100	
	Don't agree at all		Agree completely
29.	Repeated reassurance seeking can be a problem because it can lead to alienation		_____
30.	When patients are anxious they find it very difficult to resist seeking reassurance		_____
31.	Providing reassurance may enhance anxiety		_____
32.	Giving reassurance typically <u>increases</u> the patient's doubts		_____
33.	I will upset my patients if I do not offer reassurance when requested to do so		_____
34.	I should ignore all request for reassurance from my patients		_____
35.	When a patient asks me for reassurance about their fears, it can have the effect of making me feel anxious		_____
36.	Providing reassurance increases the urge for further reassurance		_____
37.	Patients usually believe that reassurance seeking is helpful		_____
38.	I feel guilty if I withhold reassurance		_____
39.	Repeated reassurance seeking has a damaging effect on interpersonal relationships		_____
40.	Giving reassurance typically <u>decreases</u> the patient's doubts		_____
41.	When a patient is acutely anxious the only thing a family member can usefully do is to provide reassurance		_____
42.	I find it very hard to resist giving my patients reassurance		_____
43.	Sometimes all I have left to offer my patients is repeated reassurance		_____
44.	Patients who seek reassurance repeatedly from me do not trust me		_____
45.	By offering reassurance I show my clients that I care		_____
46.	If requests for reassurance are ignored they will eventually cease		_____
47.	The reductions in anxiety that follow repeated reassurance are at best temporary		_____

Therapist Beliefs and Treatment of Reassurance Seeking

This questionnaire refers to Cognitive and Behavioural Therapies for anxiety disorders for individuals who seek reassurance persistently. For such patients please choose one column according to whether you think each of the following treatment elements are *undesirable*; *not necessary*; *preferable*; or *essential* when treating individuals that seek reassurance persistently.

	Undesirable	Not necessary	Preferable	Essential
1. Exploring your patient's beliefs about reassurance seeking				
2. Helping your patient to develop an alternative response to seeking reassurance, e.g. support				
3. Offering your patient repeated reassurance when requested				
4. Exploring how and from whom your patient seeks reassurance				
5. Advising relatives/carers to stop offering any reassurance				
6. Weighing up the benefits and costs of seeking reassurance				
7. Working with your client to test out the effects of seeking reassurance repeatedly on their anxiety and urges to seek				
8. Inviting relatives/carers to a session in which reassurance is discussed				
9. Being deliberately unresponsive to all requests for reassurance from your patient				
10. Drawing a diagram explaining the problem with reassurance seeking, which includes links between thoughts, feelings and				
11. Allowing your patient to contact you outside therapy sessions if they need reassurance				
12. Offering a rationale for the detrimental role of excessive reassurance seeking				
13. Exploring the interpersonal effects of repeated reassurance seeking				
14. Strongly instructing your patient to stop seeking any reassurance				
15. Explaining the role of reassurance seeking in maintaining anxiety				
16. Rehearsing with relatives/carers ways of responding without giving reassurance				
17. Other important treatment interventions which have been left out of the list, please state:				

Chapter 5 Appendices

Appendix F

Treatment interventions that are considered important and not important when treating ERS within the context of CBT – **Qualified therapists with over 5 years of clinical experience.**

Treatment Intervention	Item Mean (SD)	N	Undesirable n (%)	Not necessary n (%)	Preferable n (%)	Essential n (%)
SHOULD BE PART OF CBT						
Explaining the role of reassurance seeking in maintaining anxiety	1.83 (.53)	87	2 (2.3%)	0 (0.0%)	9 (10.3%)	76 (87.4%)
Exploring your patient's beliefs about reassurance seeking	1.77 (.60)	87	2 (2.3%)	2 (2.3%)	10 (11.5%)	73 (83.9%)
Helping your patient to develop an alternative response to seeking reassurance, e.g. support	1.74 (.54)	86	1 (1.2%)	1 (1.2%)	17 (19.8%)	67 (77.9%)
Weighing up the benefits and costs of seeking reassurance	1.74 (.49)	87	0 (0.0%)	2 (2.3%)	19 (21.8%)	66 (75.9%)
Working with your client to test out the effects of seeking reassurance repeatedly on their anxiety and urges to seek further reassurance	1.71 (.57)	87	1 (1.1%)	2 (2.3%)	18 (20.7%)	66 (75.9%)
Drawing a diagram explaining the problem with reassurance seeking, which includes links between thoughts, feelings and behaviours	1.62 (.62)	86	1 (1.1%)	3 (3.5%)	24 (27.9%)	58 (67.4%)
Offering a rationale for the detrimental role of excessive reassurance seeking	1.61 (.64)	87	1 (1.1%)	4 (4.6%)	23 (26.4%)	59 (67.8%)
Exploring how and from whom your patient seeks reassurance	1.53 (.70)	87	2 (2.3%)	4 (4.6%)	27 (31.0%)	54 (62.1%)
Exploring the interpersonal effects of repeated reassurance seeking	1.33 (.58)	87	0 (0.0%)	5 (5.7%)	48 (55.2%)	34 (39.1%)
Rehearsing with relatives/carers ways of responding without giving reassurance	1.05 (.66)	87	2 (2.3%)	11 (12.6%)	55 (62.5%)	19 (21.8%)
Inviting relatives/carers to a session in which reassurance is discussed	1.02 (.59)	87	1 (1.1%)	11 (12.6%)	60 (69.0%)	15 (17.2%)
Advising relatives/carers to stop offering any reassurance	.87 (.81)	86	7 (8.1%)	13 (15.1%)	50 (58.1%)	16 (18.6%)
SHOULD NOT BE PART OF CBT						
Allowing your patient to contact you outside therapy sessions if they need reassurance	-.74 (.62)	87	71 (81.6%)	10 (11.5%)	5 (5.7%)	1 (1.1%)
Offering your patient repeated reassurance when requested	-.77 (.47)	87	69 (79.3%)	16 (18.4%)	2 (2.3%)	0 (0%)
UNDETERMINED						
Strongly instructing your patient to stop seeking any reassurance	-.01 (.94)	86	32 (37.2%)	29 (33.7%)	19 (22.1%)	6 (7.0%)
Being deliberately unresponsive to all requests for reassurance from your patient	-.14 (.97)	87	42 (48.3%)	20 (23%)	20 (23.0%)	5 (5.7%)

Treatment interventions that are considered important and not important when treating ERS within the context of CBT – **Qualified therapists with up to 5 years of clinical experience**

Treatment Intervention	Item Mean (SD)	N	Undesirable n (%)	Not necessary n (%)	Preferable n (%)	Essential n (%)
SHOULD BE PART OF CBT						
Explaining the role of reassurance seeking in maintaining anxiety	1.92 (.31)	88	0 (0.0%)	1 (1.1%)	5 (5.7%)	82 (93.2%)
Exploring your patient's beliefs about reassurance seeking	1.81 (.45)	88	0 (0.0%)	2 (2.2%)	13 (14.8%)	73 (83.0%)
Working with your client to test out the effects of seeking reassurance repeatedly on their anxiety and urges to seek further reassurance	1.80 (.41)	88	0 (0.0%)	0 (0.0%)	18 (20.5%)	70 (79.5%)
Offering a rationale for the detrimental role of excessive reassurance seeking	1.77 (.45)	87	0 (0.0%)	1 (1.1%)	18 (20.7%)	68 (78.2%)
Drawing a diagram explaining the problem with reassurance seeking, which includes links between thoughts, feelings and behaviours	1.69 (.49)	88	0 (0.0%)	1 (1.1%)	25 (28.4%)	62 (70.5%)
Weighing up the benefits and costs of seeking reassurance	1.69 (.46)	88	0 (0.0%)	0 (0.0%)	27 (30.7%)	61 (69.3%)
Helping your patient to develop an alternative response to seeking reassurance, e.g. support	1.69 (.61)	88	2 (2.3%)	1 (1.1%)	19 (21.6%)	66 (75.0%)
Exploring how and from whom your patient seeks reassurance	1.65 (.50)	88	0 (0.0%)	1 (1.1%)	29 (33.0%)	58 (65.9%)
Exploring the interpersonal effects of repeated reassurance seeking	1.32 (.64)	88	0 (0.0%)	8 (9.1%)	44 (50.0%)	36 (40.9%)
Advising relatives/carers to stop offering any reassurance	1.07 (.69)	88	3 (3.4%)	9 (10.2%)	55 (62.5%)	21 (23.9%)
Rehearsing with relatives/carers ways of responding without giving reassurance	1.05 (.71)	88	3 (3.4%)	11 (12.5%)	53 (60.2%)	121 (23.9%)
Inviting relatives/carers to a session in which reassurance is discussed	.92 (.61)	88	1 (1.1%)	17 (19.3%)	58 (65.9%)	12 (13.6%)
SHOULD NOT BE PART OF CBT						
Being deliberately unresponsive to all requests for reassurance from your patient	-.22 (.93)	88	45 (51.1%)	21 (23.9%)	18 (20.5%)	4 (4.5%)
Offering your patient repeated reassurance when requested	-.78 (.49)	88	72 (81.8%)	13 (14.8%)	3 (3.4%)	0 (0%)
Allowing your patient to contact you outside therapy sessions if they need reassurance	-.88 (.33)	88	77 (87.5%)	11 (12.5%)	0 (0.0%)	0 (0.0%)
UNDETERMINED						
Strongly instructing your patient to stop seeking any reassurance	-.01 (.95)	88	35 (39.8%)	24 (27.3%)	24 (27.3%)	5 (5.7%)

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Appendix G

Idiographic Measure

Date:

How *often* did you seek reassurance today?
(e.g. 10 times etc.).

0 10 20 30 40 50 60 70 80 90 100

How anxious did you feel throughout the day?
0 (not at all) – 100 (extremely anxious)

0 10 20 30 40 50 60 70 80 90 100

How strong was the urge to seek reassurance?
0 (no urge) – 100 (extremely strong urge)

0 10 20 30 40 50 60 70 80 90 100

How much do you believe:

0 10 20 30 40 50 60 70 80 90 100

0 (not at all) – 100 (as much as possible)

How much do you believe:

0 10 20 30 40 50 60 70 80 90 100

0 (not at all) – 100 (as much as possible)

How did you seek reassurance today (e.g. called my wife and asked questions about my worries; asked a family member to perform certain tasks; asked strangers for reassurance etc.)? Please write here:

Chapter 7 Appendices

Appendix H

- The Reassurance Seeking Questionnaire -

Often when people feel anxious or distressed they seek reassurance. The questions below are about ways in which you might try to get reassurance, the effects of seeking reassurance on your feelings or mood, and what impact reassurance seeking has on you and on other people.

Please rate each item of the questionnaire using the following scale and circle around the number you find most fitting.

Never (0) Rarely (1) Sometimes (2) Often (3) Very often (4) Always (5)

(1) I ask for reassurance from my family	0 1 2 3 4 5
(2) I believe that my anxiety will not go down until I get reassurance	0 1 2 3 4 5
(3) I ask others to do things as a way of reassuring me	0 1 2 3 4 5
(4) When I seek reassurance I try not to ask too many times so I don't upset or annoy the person	0 1 2 3 4 5
(5) I ask for reassurance from people I know	0 1 2 3 4 5
(6) When I seek reassurance I repeat what the person says so that they can confirm it	0 1 2 3 4 5
(7) When someone is giving me reassurance I look carefully at the person to see if they are confident about what they say to me	0 1 2 3 4 5
(8) When I seek reassurance I ask the person to repeat what they said to me	0 1 2 3 4 5
(9) AFTER I have sought reassurance I feel guilty	0 1 2 3 4 5
(10) I use phrases (e.g., Is this all right?) so that the person won't know that I am seeking reassurance	0 1 2 3 4 5
(11) I ask for reassurance from people close to me	0 1 2 3 4 5
(12) I show my appreciation (e.g., say 'thank you') to make the person comfortable with giving reassurance	0 1 2 3 4 5
(13) I find it hard to resist seeking reassurance	0 1 2 3 4 5
(14) AFTER I have sought reassurance I feel frustrated	0 1 2 3 4 5
(15) When I seek reassurance it brings me closer to the other person	0 1 2 3 4 5

(16) I seek reassurance from other people even when I can see that it frustrates them	0 1 2 3 4 5
(17) If possible, I will continue to seek reassurance until I feel certain	0 1 2 3 4 5
(18) When I seek reassurance I become annoyed if the person answers in an inconsistent manner	0 1 2 3 4 5
(19) When I seek reassurance I feel it reduces the burden of responsibility	0 1 2 3 4 5
(20) If I do not get reassurance in the 'right way' I seek it until I get it	0 1 2 3 4 5
(21) I feel that seeking reassurance can make my problems worse	0 1 2 3 4 5
(22) AT THE TIME I seek reassurance it makes me feel frustrated	0 1 2 3 4 5
(23) I ask for reassurance from my partner	0 1 2 3 4 5
(24) When I seek reassurance I look for mistakes and contradictions in how people answer my questions	0 1 2 3 4 5
(25) If possible, I will continue to seek reassurance until I feel 'just right'	0 1 2 3 4 5
(26) I avoid asking for reassurance because I know it frustrates other people	0 1 2 3 4 5
(27) I seek reassurance more often than necessary	0 1 2 3 4 5
(28) I feel that nothing can substitute for reassurance	0 1 2 3 4 5
(29) Seeking reassurance is counter-productive for me	0 1 2 3 4 5
(30) People feel frustrated when I seek reassurance from them	0 1 2 3 4 5
(31) I disagree with people who say that reassurance seeking is unhelpful for me	0 1 2 3 4 5
(32) When I seek reassurance I try to analyze whether the person fully understands my worry	0 1 2 3 4 5
(33) My reassurance seeking puts strain on other people	0 1 2 3 4 5
(34) I seek reassurance to make sure there is nothing wrong with my health	0 1 2 3 4 5
(35) I repeatedly ask others for reassurance until I am sure they understand what I am worried about	0 1 2 3 4 5